NEXCOM

COMMITTED TO CUSTOMER SUCCESS

2019
Intelligent Platform & Services

- Factory Automation
- Industrial Panel PC
- Applied Panel PC
- Industrial Fanless Computer
- Intelligent Kiosk Solution
- Digital Signage Player

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IPS

Intelligent Platform & Services

Factory Automation
HMI
Industrial Panel PC & Monitor
Applied Panel PC & Monitor
Fanless Computer
Intelligent Kiosk Solution
Digital Signage Player
Kiosk Panel PC
Open Frame Panel PC

About NEXCOM

Reliable Partner for the Intelligent Solutions

Founded in 1992 and headquartered in Taipei, Taiwan, NEXCOM is committed to being your trustworthy partner in building the intelligent solutions. To surpass customers' expectations, NEXCOM makes the difference by utilizing its decades of industrial computing experience, a highly talented R&D team, and by providing exceptional levels of customer service. With these core strengths, NEXCOM has enabled its customers to win key projects in a diverse range of industries.

With its focus on delivering these core values to better serve customers, NEXCOM integrates its capabilities and operates eight global businesses, which are Industrial Mesh, Intelligent Digital Security, Intelligent Platform & Services, Mobile Computing Solutions, Medical & Healthcare Informatics, Network and Communication Solutions, Smart Manufacturing and Open Robots and Machines. This strategic deployment enables NEXCOM to offer time-to-market, time-to-solution products and service without compromising cost.

In addition, the service-to-market business model gives NEXCOM core competence to build a strong world-class service network by providing customized service, global logistics, local access, and real-time support. Operating six subsidiaries, from China, Italy, Japan, Taiwan, the United States, to the United Kingdom, NEXCOM is able to better facilitate customers' requirements as well as closely work with global partners in different regions.

Partners should also be assured that NEXCOM's Taiwan based Headquarters and subsidiary offices in China, UK and USA have obtained ISO 9001:2008 Certification.

EMBUX	Industrial Mesh: Industry 4.0 Outdoor Wireless Solution, IoT Sensor Networking, ARM/MCU Embedded Board Design & Manufacturing Service
GreenBase	Intelligent Digital Security: IP Video Surveillance Camera, Mobile Camera, ANPR/LPR Network Camera, Panoramic Camera, NVR Server Platform
IPS	Intelligent Platform & Services: Smart City, Smart Retails, Digital Signage, Interactive Kiosk, Hospitality, Gateway, AI Edge & ODM Customization Services
MCS	Mobile Computing Solutions: Vehicle Telematics Computer, In-Vehicle Panel Computer, In-Vehicle AI Computer, Railway Computer, Vehicle Mount Display, Modular Vehicle Computer System, In-Vehicle Networking Switch, Mobile NVR
MHI	Medical and Healthcare Informatics: Total Solutions with a Variety of Medical IT Systems
NCS	Network and Communication Solutions: Network Security, HPC, Telecommunication, Storage, SDN/NFV, Industrial Security
NexAIoT	Smart Manufacturing: iAT2000 Cloud SCADA & Enterprise War Room, Predictive Diagnostic Maintenance, IoT Edge Solution, Industry 4.0 Project Execution
NexCobot	Open Robots and Machines: Industrial Robot Controller, EtherCAT Motion Control, Smart M2M Solution, Educational Robot, Smart Retail Solution

Corporate Vision

To become the industrial leader in providing intelligent solutions, NEXCOM utilizes its industry leading technology, localized customer support and worldwide logistics services.
This will be achieved by:

- Great team work
- Cooperation with trusted partners
- Growth through innovation

Corporate Mission

- An innovative supplier in vertical application markets
- A quality partner in engineering, manufacturing and services

Business Strategy

Aim to better support the activities of all its partners, NEXCOM divides its sales force into six dedicated business units to target rapidly expanding vertical markets. This enhances each business unit concentrating on strategic channel accounts and on repeat order business. Moreover, NEXCOM's business units have been set up to serve the requirements of key project accounts, where product ODM and project support are frequently required.

NEXCOM is working with embedded computing solution providers to envision new opportunities for growth. We'll help you deliver reliable vertical solutions, optimized for the next wave of IoT and Industry 4.0 solutions.

Research and Development

Innovation, Quality, Speed and One-stop Service

Over a decade ago, NEXCOM successfully launched the PEAK series of Single Board Computers onto the IPC market, and in doing so, gained a solid reputation for product quality and innovation. In subsequent years, NEXCOM has enhanced its reputation for R&D excellence with a multitude of high-end technology products, which has cemented NEXCOM as one of the industry leaders for R&D and innovation.

The mission of NEXCOM R&D team is to design exceptional products that meet the stringent requirements of today's global markets. In order to achieve this goal, we have recruited hundreds of talented engineers who have the knowledge and expertise to make NEXCOM's products stand out in this highly competitive market.

NEXCOM offers solutions for IoT gateway, robot controller, connected cars, Industry 4.0, and industrial security applications. The team is encouraged to "Think with New Ideas" and "Know how to make it and do it right first time". In addition, NEXCOM 's R&D team has been expanded to over 300 engineers with the ration of software engineers to hardware engineers coming to about 1:1, and remains as one of core competences of the company.

Versatile Design Capabilities

- Fanless technology for industrial computer
- High availability network security platform, blade, and cPCI
- Rugged tablet computer and car PC
- Ultra small footprint computer-on-module
- High speed networking
- Isolated and non-isolated power system
- Isolated and non-isolated industrial I/O
- Wide range of operating temperature

24/7 Production Line

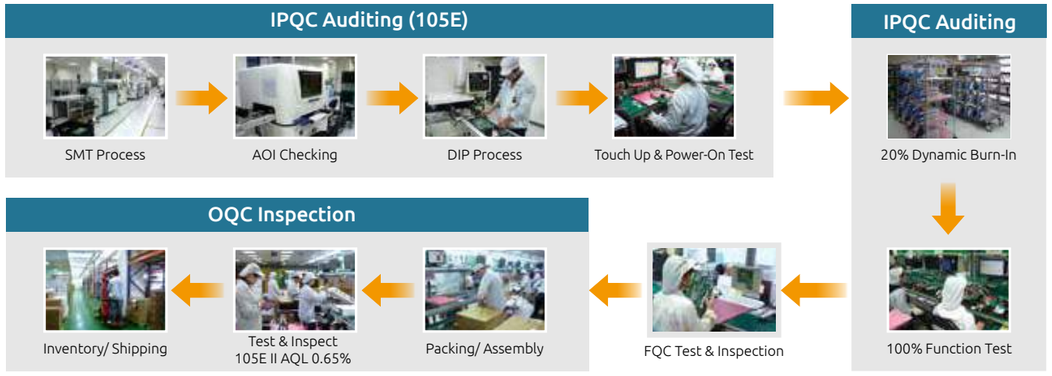
Optimal Manufacturing Efficiency

The manufacturing of delicate products requires a high-level technology, craftsmanship, standards and time-to-market efficiency. Over years continual investment in advanced manufacturing equipment and systemic training programs has enabled NEXCOM to obtain optimal manufacturing efficiency.

To fulfill the increasing market demand for NEXCOM's products, the company has opened a 24/7 production line. This investment not only furthers the quality of products, but also reduces production lead-time for all global customers.

Quality Assurance

Under a strict Quality Assurance System, product design and reliability are controlled to support all critical solutions, and ensure Total Quality Assurance (TQA) implementation for all NEXCOM products and service. Furthermore, NEXCOM technical support team aims to provide feedback within 24 hours to ensure technical issues are resolved in the shortest possible time.



Closed-Loop Quality Assurance System

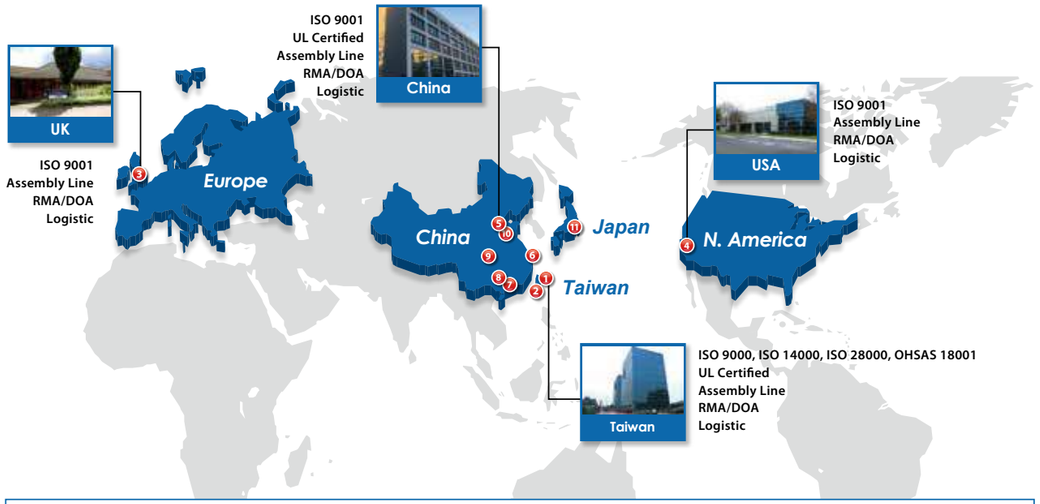
Green Policy

As a global citizen, NEXCOM is committed to providing green products and services, which are compliant with WEEE and RoHS legislation. NEXCOM continues to proactively work with industry peers and suppliers, to clarify standards, and identify compatible technologies and practices that help reduce hazardous substances from our products and manufacturing processes.

Global Fulfillment Service

Product delivery and customer support are always more effective when delivered locally. NEXCOM localizes support and provides a global customer service network to handle all aspects of global business, from presales, order taking, and system assembly to logistics. For expeditious product delivery, NEXCOM has established four regional service centers: Taiwan (for Asia), USA (for North America and South America), the United Kingdom (for Europe) and China. Therefore, NEXCOM customers benefit from quality assured product assembly and four service centers.

NEXCOM has invested heavily to establish operational infrastructures, including advanced equipment and facilities, not only at its global headquarters but also at subsidiary offices. Today, each of our service centers, with ISO 9001:2008 certification, has a purpose built assembly line, RMA/ DOA center and warehouse storage capability.



NEXCOM Global Service Network

Assembly Line Operation

NEXCOM offers custom-built products based on customers' specific requirements through the build-to-order services. A dedicated 24/7 assembly line and Quality Assurance System are installed in the services center to ensure exceptional production efficiency and superb product performance and reliability.

Service Pledge and Connection

As a reliable intelligent systems provider for vertical markets, NEXCOM provides the very best products and the most expeditious service to help customers build the digital infrastructure. Comprehensive types of service are provided to promptly satisfy varying requirements. In addition to the headquarters in Taiwan, seven subsidiaries and distributors in strategic worldwide locations are at your service.

Service Types

Quotation
Project Consultant
Technical Support
Solution Alliance
RMA/DOA
Assembly/ Test
Global Logistics
Customization
ODM
Original Design Manufacturing

Your Truly Global Information Resource

www.nexcom.com

www.nexcom.com is your one-stop platform for the latest information on all NEXCOM products and services. The rejuvenated website not only contains product relevant information and data, solutions/ products demo, up-to-date news, but incorporates online downloads, publications, and technical service supports, such as RMA/ DOA centre. Furthermore to localize service and support, seven NEXCOM sister websites remain to serve visitors in diverse geographical regions.

Get the Latest Updates Anytime, Anywhere

m.nexcom.com

At the end of the year 2011, NEXCOM launches its mobile site, m.nexcom.com. The site aims to cross time and space boundaries by allowing users to access the latest innovation and information of NEXCOM via smartphones. On this website, users will easily find our latest products, news, application stories, white papers, and videos. The mobile site now supports iOS and Android system. Please visit us at m.nexcom.com.

Design and Manufacturing Services (DMS)

Customized Service for Tailor-Made Solutions

NEXCOM provides cost-effective and time-to-market Design and Manufacturing Services (DMS). The DMS offers product customization from core modular designs to finished products based on customers' specifications in all kinds of industrial field. The levels of the service include manufacturing new CPU boards and system based products to fulfill customers' unique applications.

Unique DMS Features

With vast experience, the know-how, leading technology and innovative design capabilities, NEXCOM DMS incorporates the following features:

Prompt Time-to-Market

NEXCOM possesses a dedicated project management team to monitor and ensure each DMS project is delivered on schedule. Thus, a quick time-to-market solution can be offered with time-scales varying from one-three months for the design phase, with an average six month period from design to market.

Flexible Design and Manufacturing

NEXCOM possesses a complete R&D team to design and engineer the latest industrial grade products. As R&D engineers grouped into small cross-functional teams, they can develop more reliable products with flexible designs and quicker response to customers' requirements. In addition to our R&D capabilities, the state of art manufacturing facility and production lines enables NEXCOM to offer a flexible manufacturing with highly skilled factory staff.

Rigid Quality Control

NEXCOM is pledged to deliver high quality products, from design to manufacture, and safeguard against defective products by implementing a rigid Quality Assurance System. In this system, at the end of each process, NEXCOM performs various tests to ensure that the product passes the industrial standard before it enters into next stage. Finally, additional tests are performed to ensure all board and system level products function correctly. Tests include "Failure Mode and Effects Analysis", "Vibration Test", "Burn-in Chambers", "Drop Test", and "AC Power Source Test".

Extensive DMS Experience

We set higher standards! NEXCOM surpasses your tailor-made product requirements with extensive DMS experiences. We are specialized in X86 architecture and have accumulated invaluable experience and know-how in real working environments. Moreover, with a superb reputation, NEXCOM has under its belt many ODM projects in diverse fields, such as gaming, medical, POS, network security, transportation, marine, blade servers, and Linux BIOS etc.

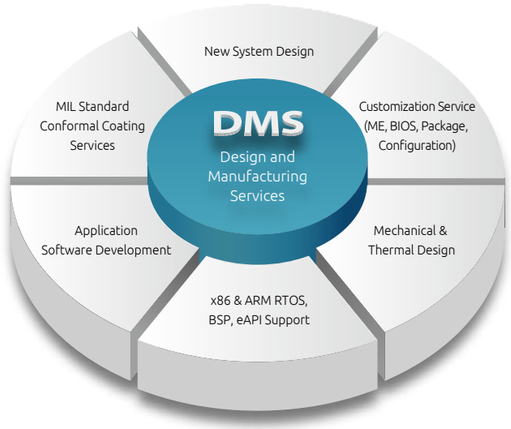
Scope of DMS Work

Original Design Manufacturing Service (ODMS)

NEXCOM offers a complete ODM Service starting from the brand new product design right through to the finished product. We can design products based on the customer's unique specifications and application requirements.

Customization to Order Service (CTOS)

NEXCOM also provides CTOS, which is a quick-to-market solution by modifying the existing products to fit your business requirements, such as BIOS setting, component change by using current PCM layout, chassis color change, and packing accessories etc.



Service of DMS

With decades of industrial computing experience, NEXCOM has the capability to provide different levels of customized service to manufacture innovative products with exceptional high quality. We can assist you to differentiate from competitors, and save significant time and efforts.

Level 1	Logo Re-brand	We provide the service to change the membrane to re-brand the company logo on the front panel. Customers need to provide Membrane drawing with all color pantone number. There is a service charge involved.
Level 2	Customerized Build	Customers can change the membrane and chassis color to re-brand the packing. NEXCOM can offer dedicated part numbers and BOM. MOQ and service charge are required.
Level 3	Manufacturing Service	Contract manufacturing. The service scope includes system assembly & burn-in, software loading & testing. MOQ and manufacturing service charge are required.
Level 4	New Project	The design of new board & system is available. NRE and quantity commitment are required.

Professional Conformal Coating Solution

Get Ruggedized with NEXCOM Cost-Effective Conformal Coating Service for Hash Environment Protection

Prompt Time-to-Market

NEXCOM recognizes the harsh reality that many embedded systems find themselves operating in unusual hostile environments. When conformal coating is required to protect your application against substantial humidity, dust, chemicals or temperature extremes, we can help!

Cost Effective Service to Apply Coating Solution in Vertical Market Segments

In addition to the usual military and harsh industrial environments that demand conformal coating, NEXCOM expand our conformal coating to Vehicle Telematics Computing, outdoor traffic control/surveillance, and off-shore Marine applications. These applications demand embedded computing performance with increased reliability through conformal coating process.

To support a wide range of applications in vertical markets, NEXCOM has engineered a diverse range of platforms, which incorporate the latest.

"State of the Art" Conformal Coating Line

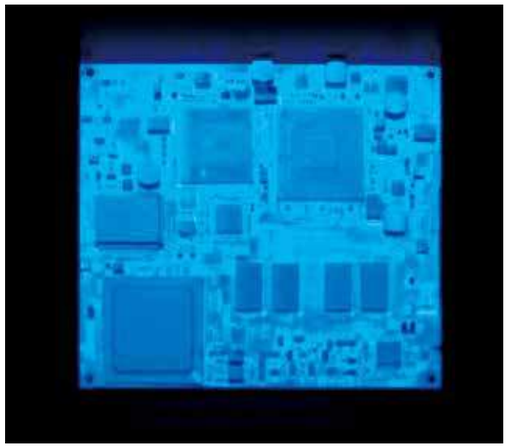
NEXCOM uses automated Conformal Coater equipment for applications that require a high level of accuracy and repeatability in moderate to high volume manufacturing environments. "State of the Art" coating line is a closed-loop robotic platform featuring optical encoder feedback on all axes.

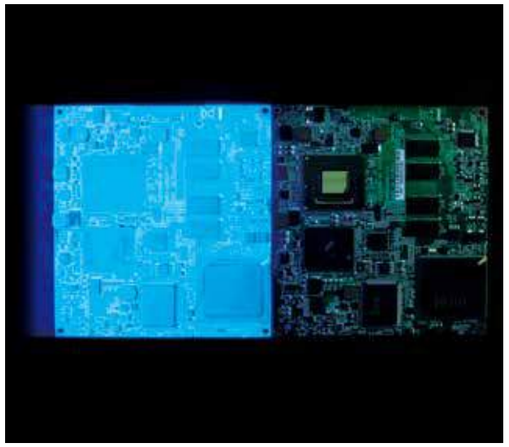
Smart Masking Technology

Our smart masking technology can pin point specific area on the PCBA for coating. The green, programmable conformal coater equipment allow user to only coat the area selected, which save labor/ material costs.

De-Flux Cleaning

To prepare a PCB for conformal coating, the circuits need to be cleaned. NEXCOM uses automatic defluxing and cleanliness testing systems. The deflux system is equipped with an automatic chemical management system that automatically doses and mixes defluxing chemicals at the turn of a keyed switch.





Real Time Cleanliness Testing

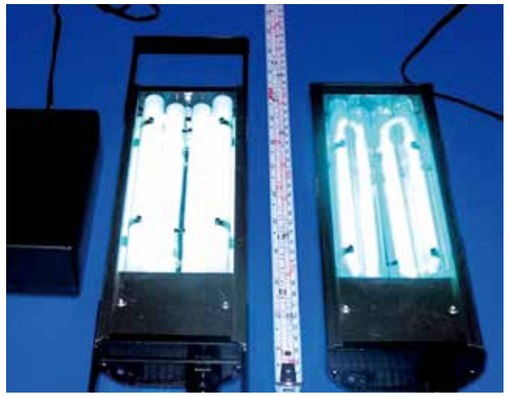
NEXCOM's deflux cleaning system is also equipped with an onboard cleanliness testing system which allows a user to program a desired cleanliness level. This assures that cleanliness levels will be consistent batch after batch.

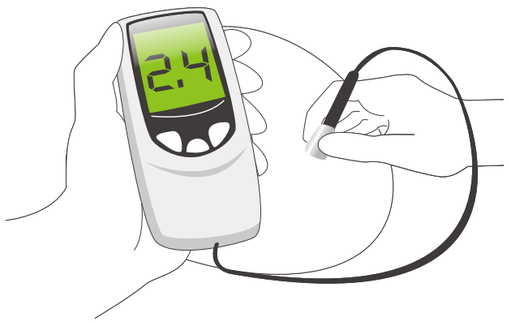
De-Coating RMA Service

NEXCOM offer De-Coating RMA service upon request. This new service allows you to further cost down and generate higher ROI.

Quality Assurance Policy and Consistency Guarantee

Conformal coating inspection is a critical factor in determining successful coating application and long term reliability of PCBs. Using the IPC standards allows the coating operator to monitor the coating application performance. NEXCOM offers 100% manual screening by examining the PCB under white and UVA light and Thickness Gauge.





NEXCOM follows IPC-A 610, IPC-CC-830, IPC J-STD-001E regulations to generate consistent, adjustable coating thickness and cleanliness.

Product Selection Guide

Factory Automation

Model						
	NIFE 101	**NIFE 103**	**NIFE 104**	**NIFE 104M**	**NIFE 105**	**NIFE 105W**
CPU	Intel® Atom E3826 1.46GHz	Intel Atom® E3826 1.46GHz	Intel Atom® E3826 1.46GHz"	Intel® Celeron® J1900 2.0GHz	Intel Atom® x5-E3930 1.8GHz	Intel Atom® x5-E3930 1.8GHz
Chipset	Intel® Bay Trail-I	Intel® Bay Trail-I	Intel® Bay Trail-I	Intel® Bay Trail-D	Intel® Apollo Lake-I	Intel® Apollo Lake-I
Max. Memory	4GB DDR3L	Onboard 2GB DDR3L	Onboard 2GB DDR3L	Onboard 4GB DDR3L	Onboard 4GB DDR3L	Onboard 4GB DDR3L
TPM	-	-	TPM 2.0 (SLB9665)	TPM 2.0 (SLB9665)	-	-
NVRAM	1Mb	-	-	-	-	-
Storage	1 x 2.5" SATA 2.0 SSD bay	Onboard eMMC 16GB	Onboard eMMC 16GB	-	Onboard eMMC 16GB	Onboard eMMC 16GB
CFast Socket	1 (external, CFast)	-	-	-	-	-
SD Card	-	-	-	-	1	1
DVI	1 (DVI-I)	-	-	-	-	-
HDMI	-	1 (micro HDMI)	1	1	1	1
DisplayPort	-	-	-	-	-	-
USB	1 x USB 2.0 1 x USB 3.0	1 x USB2.0 1 x USB3.0	1 x USB 2.0 1 x USB 3.0 1 x USB 2.0 (internal)	1 x USB 2.0 1 x USB 3.0 1 x USB 2.0 (internal)	4 x USB 3.0	4 x USB 3.0
Serial Port	2	1	1	1	2	2
RS422/485	2 (RS232/422/485)	1 (RS232*/RS485)	1 (RS232/RS485)	1 (RS232/RS485)	2 (RS232/422/485)	2 (RS232/422/485)
RS422/485 Isolation	2 (2.5KV isolation)	1 (2.5KV isolation)	1 (2.5KV isolation)	1 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)
mini-PCIe	1	2	1 x Full for USB/PCIe modules 1 x Half for USB/PCIe module	1 x Full for mSATA 1 x Half for USB/PCIe module	2 x Full size	2 x Full size
SIM Card Holder	1	1	1	1	1	1
GPIO	-	4-in/4-out (external)	4-in/4-out (external)	4-in/4-out (external)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Port	2 x GbE	2 x GbE	2 x GbE (Intel® I211)	2 x GbE (Intel® I211)	2 x GbE (Intel® I210-IT)	2 x GbE (Intel® I210-IT)
Audio	Line-out	-	-	-	-	-
Fieldbus I/O Support	-	-	-	-	-	1 (optional)
Power Input Range	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V
Win7 32-bit	V	V	V	V	-	-
Win7 64-bit	V	V	V	V	-	-
WinCE/WEC	WinCE7.0	WinCE7.0	WinCE7.0	WinCE7.0	-	-
Win10 32-bit	-	V	V	V	-	-
Win10 64-bit	-	V	V	V	V	V
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional	Optional
Expansion	-	-	-	-	-	-
Operating temp. (w/ HDD) Based on IEC 60068 STD	-20˚C to 70˚C	-5˚C to 55˚C	-5˚C to 55˚C	-5˚C to 55˚C	-5˚C to 55˚C	-5˚C to 55˚C
System Dimension (W x D x H, mm)	58 x 135.5 x 192.5	56.5 x 100 x 120	56.5 x 100 x 130	56.5 x 100 x 130	46.2 x 100 x 120	78.2 x 100 x 120
Carton Dimension (W x D x H, mm)	298 x 262x 196	223 x 191 x 206	223 x 191 x 206	223 x 191 x 206	223 x 191 x 206	223 x 191 x 206
Net Weight (kg)	1.7	0.6	0.6	0.6	0.7	0.8
Gross Weight (kg)	2.8	1.5	1.5	1.5	1.6	1.8

				
NIFE 200	**NIFE 200S**	**NIFE 200P2**	**NIFE 200P2E**	**NIFE 200E2**
Intel® Celeron® J1900 2.0GHz	Intel® Celeron® J1900 2.0GHz	Intel® Celeron® J1900 2.0GHz	Intel® Celeron® J1900 2.0GHz	Intel® Celeron® J1900 2.0GHz
Intel® Bay Trail-D	Intel® Bay Trail-D	Intel® Bay Trail-D	Intel® Bay Trail-D	Intel® Bay Trail-D
8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L
-	-	-	-	-
-	-	-	-	-
1 x 2.5" SATA HDD bay	Optional mSATA module	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
-	-	-	-	-
1	1 (internal)	1	1	1
1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)
-	-	-	-	-
1	1	1	1	1
3 x USB 2.0 1 x USB 3.0	3 x USB 2.0 1 x USB 3.0	3 x USB 2.0 1 x USB 3.0	3 x USB 2.0 1 x USB 3.0	3 x USB 2.0 1 x USB 3.0
2	2	2	2	2
2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)
2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)
2	2	2	2	2
1	1 (internal)	1	1	1
4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-In/4-out (internal)	4-in/4-out (internal)
2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Line-out (internal)	Line-out (internal)	Line-out (internal)	Line-out (internal)	Line-out (internal)
1 (optional)	-	1 (optional)	1 (optional)	1 (optional)
ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V
V	V	V	V	V
V	V	V	V	V
WinCE7.0	WinCE7.0	WinCE7.0	WinCE7.0	WinCE7.0
V	V	V	V	V
V	V	V	V	V
Optional	Optional	Optional	Optional	Optional
-	-	2x PCI	1 x PCI and 1 x PCIe x4	2 x PCIe x1
-5˚C to 55˚C	-5˚C to 55˚C	-5˚C to 55˚C	-5˚C to 55˚C	-5˚C to 55˚C
85 x 157 x 214	50x 157x 205	151 x 157 x 230	151 x 157 x 230	151 x 157 x 230
346 x 265 x 200	346 x 265 x 200	355 x 259 x 321	355 x 259 x 321	355 x 259 x 321
2.3	2.0	3.3	3.3	3.3
3.3	3.0	4.3	4.3	4.3

Product Selection Guide

Factory Automation

Model			
	NIFE 300	**NIFE 300P2**	**NIFE 300E2**
CPU	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)
Chipset	Intel® Q170	Intel® Q170	Intel® Q170
Max. Memory	8GB DDR4	8GB DDR4	8GB DDR4
TPM	-	-	-
NVRAM	-	-	-
Storage	2 x 2.5" SATA HDD bay	2 x 2.5" SATA HDD bay	2 x 2.5" SATA HDD bay
CFast Socket	1 (external, CFast)	1 (external, CFast)	1 (external, CFast)
SD Card	-	-	-
DVI	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)
HDMI	1	1	1
DisplayPort	-	-	-
USB	2 x USB2.0 4 x USB3.0	2 x USB 2.0 4 x USB 3.0	2 x USB 2.0 4 x USB 3.0
Serial Port	2	2	2
RS422/485	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)
RS422/485 Isolation	2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)
mini-PCIe	2	2	2
SIM Card Holder	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Port	3 x GbE	3 x GbE	3 x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
Fieldbus I/O Support	1 (optional)	1 (optional)	1 (optional)
Power Input Range	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V
Win7 32-bit	V	V	V
Win7 64-bit	V	V	V
WinCE/WEC	-	-	-
Win10 32-bit	V	V	V
Win10 64-bit	V	V	V
Power Supply Adapter	Optional	Optional	Optional
Expansion	-	2 x PCI	1 x PCIex8 and 1x PCIe x4
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55˚C	-5°C to 55˚C	-5°C to 55˚C
System Dimension (W x D x H, mm)	90 x 185 x 251	155 x 185 x 251	155 x 185 x 251
Carton Dimension (W x D x H, mm)	389 x 329 x 251	389 x 329 x 336	389 x 329 x 336
Net Weight (kg)	3.5	4.4	4.4
Gross Weight (kg)	4.9	6.1	6.1

Model				
	NIFE 300P2E	**NIFE 300E16**	**NIFE 300P3**	**NIFE 300E3**
CPU	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)	6th Gen. Intel® Core™ i7/i5/i3 LGA socket (Skylake-S)
Chipset	Intel® Q170	Intel® Q170	Intel® Q170	Intel® Q170
Max. Memory	8GB DDR4	8GB DDR4	8GB DDR4	8GB DDR4
TPM	-	-	-	-
NVRAM	-	-	-	-
Storage	2x 2.5" SATA HDD bay	2x 2.5" SATA HDD bay	2x 2.5" SATA HDD bay	2x 2.5" SATA HDD bay
CFast Socket	1 (external, CFast)	1 (external, CFast)	1 (external, CFast)	1 (external, CFast)
SD Card	-	-	-	-
DVI	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)
HDMI	1	1	1	1
DisplayPort	-	-	-	-
USB	2 x USB 2.0 4 x USB 3.0	2 x USB 2.0 4 x USB 3.0	2 x USB 2.0 4 x USB 3.0	2 x USB 2.0 4 x USB 3.0
Serial Port	2	2	2	2
RS422/485	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)
RS422/485 Isolation	2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)	2 (2.5KV isolation)
mini-PCIe	2	2	2	2
SIM Card Holder	1	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Port	3 x GbE	3 x GbE	3 x GbE	3 x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
Fieldbus I/O Support	1 (optional)	1 (optional)	1 (optional)	1 (optional)
Power Input Range	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V
Win7 32-bit	V	V	V	V
Win7 64-bit	V	V	V	V
WinCE/WEC	-	-	-	-
Win10 32-bit	V	V	V	V
Win10 64-bit	V	V	V	V
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	1 x PCI and 1 x PCIe x8	1 x PCIe x16	2 x PCI and 1 x PCIe x8	2 x PCI and 1 x PCIe x8
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55˚C	-5°C to 55˚C	-5°C to 55˚C	-5°C to 55˚C
System Dimension (W x D x H, mm)	155 x 185 x 251	155 x 185 x 251	175 x 185 x 251	175 x 185 x 251
Carton Dimension (W x D x H, mm)	389 x 329 x 336	389 x 329 x 336	389 x 329 x 336	389 x 329 x 336
Net Weight (kg)	4.4	4.4	4.7	4.7
Gross Weight (kg)	6.1	6.1	6.4	6.4

Product Selection Guide

HMI

Model			
	eTOP504	**eSMART04**	**eTOP507/507N**
LCD Size	4.3" 16:9	4.3" 16:9	7" 16:9
Max. Resolution	WQVGA, 480 x 272	WQVGA, 480 x 272	WVGA, 800 x 480
Luminum (cd/m^2)	150 typ.	200 typ.	300 typ.
Backlight	LED	LED	LED
LCD Color	64K	64K	64K
Touch Screen	Resistive	Resistive	Resistive
OS	Microsoft Windows CE 6.0	Linux 3.12	Microsoft Windows CE 6.0
Memory	256MB DDR	256MB DDR	256MB DDR
User Memory	128MB	2GB	128MB
Ethernet	2 (10/100 Mbit)	1 (10/100 Mbit)	2 (10/100 Mbit)
USB	2 x USB2.0	1 x USB 2.0	2 x USB2.0
COM Port	1 x RS232, 422, 485 software configuration	1 x RS232, 422, 485 software configuration	1 x RS232, 422, 485 software configuration
Power Jack	3-pin terminal block	3-pin terminal block	3-pin terminal block
SD Socket	Yes	-	Yes
Expansion	1 Optional plug-in	-	2 Optional plug-in
Construction	Aluminum	Plastic	Aluminum
Mounting	Panel mounting	Panel mounting	Panel mounting
Power Input	24 Vdc (10 to 32 Vdc)	24 Vdc (18 to 32 Vdc)	24 Vdc (10 to 32 Vdc)
Current Consumption	0.55A at 24Vdc (max.)	0.25A at 24Vdc (max.)	0.65A at 24Vdc (max.)
Power Supply Adapter	Optional	Optional	Optional
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-20˚C to 70˚C	-20˚C to 70˚C	-20˚C to 70˚C
Operating Humidity	5% ~ 85%, n on-condensing	5% ~ 85%, non-condensing	5% ~ 85%, non-condensing
IP Level	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)
Cut Out Size (W x H, mm)	136 x 96	136 x 96	176 x 136
Dimmension (W x H x D, mm)	147 x 107 x 60	147 x 107 x 34	187 x 147 x 51
Net Weight (kg)	Approx. 1	Approx 0.4	Approx. 1
Gross Weight (kg)	1.3	0.7	1.4

				
	eSMART07M	**eTOP510**	**eSMART10**	**eLITE610**
LCD Size	7" 16:9	10.4" 4:3	10.1" 16:9	10.1" 16:9
Max. Resolution	WVGA, 800 x 480	SVGA, 800 x 600	WSVGA, 1024 x 600	WSVGA, 1024 x 600
Luminum (cd/m^2)	200 typ.	300 typ.	200 typ.	240
Backlight	LED	LED	LED	LED
LCD Color	64K	64K	64K	16.7M
Touch Screen	Resistive	Resistive	Resistive	Resistive
OS	Linux 3.12	Microsoft Windows CE 6.0	Linux 3.12	Windows 10
Memory	512MB DDR	256MB DDR	512MB DDR	4GB DDR3L
User Memory	4GB	256MB	4GB	32GB
Ethernet	1 (10/100 Mbit)	2 (10/100 Mbit)	1 (10/100 Mbit)	2 (10/100/1000 Mbit)
USB	1 x USB 2.0	2 x USB2.0	1 x USB 2.0	2 x USB 3.0
COM Port	1 x RS232, 422, 485 software configuration	1 x RS232, 422, 485 software configuration	1 x RS232, 422, 485 software configuration	1 x RS232, 422, 485 BIOS configuration
Power Jack	3-pin terminal block	3-pin terminal block	3-pin terminal block	3-pin terminal block
SD Socket	-	Yes	-	-
Expansion	-	2 Optional plug-in	-	-
Construction	Plastic	Aluminum	Plastic	Plastic
Mounting	Panel mounting	Panel mounting	Panel mounting	Panel/ VESA mounting
Power Input	24 Vdc (18 to 32 Vdc)	24 Vdc (10 to 32 Vdc)	24 Vdc (18 to 32 Vdc)	24 Vdc (19.2 to 28.8 Vdc)
Current Consumption	0.3A at 24Vdc (max.)	0.95A at 24Vdc (max.)	0.38A at 24Vdc (max.)	1.64A at 24Vdc (max.)
Power Supply Adapter	Optional	Optional	Optional	Optional
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C	-5°C to 50°C
Storage Temp.	-20˚C to 70˚C	-20˚C to 70˚C	-20˚C to 70˚C	-20˚C to 75˚C
Operating Humidity	5% ~ 85%, non-condensing	5% ~ 85%, non-condensing	5% ~ 85%, non-condensing	5% ~ 90%, non-condensing
IP Level	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)	IP66 (front), IP20 (rear)
Cut Out Size (W x H, mm)	176 x 136	276 x 221	271 x 186	271 x 186
Dimmension (W x H x D, mm)	187 x 147 x 34	287 x 232 x 60	282 x 197 x 35	282 x 197 x 35
Net Weight (kg)	Approx. 0.6	Approx. 2.1	Approx. 1	Approx. 1.37
Gross Weight (kg)	0.9	2.8	1.6	2.3

Product Selection Guide

Industrial Panel PC

Model				
	IPPC 1040P	**IPPC 1640P-B**	**IPPC 2140P-B**	**IPPC 1560TE**
LCD Size	10.1" 16:9	15.6" 16:9	21.5" 16:9	15" 4:3
Max. Resolution	WXGA 1280 x 800	HD, 1366x768	Full HD, 1920 x 1080	XGA, 1024 x 768
Luminance (cd/m^2)	300	400	300	400
Contrast Ratio	1300	500	5000	700
Viewing Angle (H-V)	85(U), 85(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)	60(U), 80(D), 80(L), 80(R)
Backlight	LED	LED	LED	LED
LCD Color	262K	16.7M	16.7M	16.2M
Touch Screen	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap	Resistive 5-wire
Touch Light Transmission	87%	87%	87%	81%
CPU	Intel Atom® quad core processor J1900, 2.0GHz	Intel Atom® quad core processor J1900, 2.0GHz	Intel Atom® quad core processor J1900, 2.0GHz	3rd generation Intel® Core™ i5-3610ME, 2 x 2.7GHz
Chipset	-	-	-	Intel® HM76
OS	Win7, Win10	Win7, Win10	Win7, Win10	WinXP, Win7
Memory	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module	4GB DDR3 SO-DIMM module
CFast Socket	1	1	1	1
2nd Display Output	VGA	VGA	VGA	VGA
PS2 KB/MS	-	-	-	-
Ethernet (10/100/1000)	2	2	2	2
Line-out	Line-out	Line-out	Line-out	-
Line-in	-	-	-	-
Mic-in	-	-	-	-
USB 2.0/3.0	2/1	2/1	2/1	4 (hidden)/-
COM Port	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485, 1 x RS232
Power Switch	1	1	1	1
Remote Power Switch	2-pin	2-pin	2-pin	-
Reset Button	1	1	1	1
Power Jack	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector
Expansion	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe/ 2 x PCI or PCIe slots
Construction Front Panel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front bezel
Mounting	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	+24V DC+-20%; Fuse: 250V/10A
Power Supply Adapter	Optional	Optional	Optional	Optional
Operating Temp.	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 50°C
Storage Temp.	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66
Cut Out Size (W x H, mm)	294 x 209	398 x 293	544 x 364	455 x 295
Dimension (W x H x D, mm)	308 x 223 x 60.7	417.4 x 312.4 x 63.75	562.4 x 382.4 x 62.85	477.64 x 310 x 95.72
Net Weight (kg)	3.7	6.4	9.26	9.51
Certifications	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A

				
	IPPC A1570T-B	**IPPC A1570P-B**	**IPPCA1770T-B**	**IPPC A1770P-B**
LCD Size	15" 4:3	15" 4:3	17" 4:3	17" 4:3
Max. Resolution	XGA, 1024 x 768	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m^2)	450	450	350	350
Contrast Ratio	800	800	1000	1000
Viewing Angle (H-V)	70(U), 80(D), 80(L), 80(R)	70(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED	LED
LCD Color	16.2M	16.2M	16.7M	16.7M
Touch Screen	Resistive 5-wire	10 x point P-Cap	Resistive 5-wire	10 x point P-Cap
Touch Light Transmission	81%	87%	81%	87%
CPU	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket
Chipset	Intel® Q87	Intel® Q87	Intel® Q87	Intel® Q87
OS	Win7, Win10	Win7, Win10	Win7, Win10	Win7, Win10
Memory	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L
CFast Socket	1	1	1	1
2nd Display Output	DVI-I+DP	DVI-I+DP	DVI-I+DP	DVI-I+DP
PS2 KB/MS	1	1	1	1
Ethernet (10/100/1000)	2	2	2	2
Line-out	Line-out	Line-out	Line-out	Line-out
Line-in	Line-in	Line-in	Line in	Line-in
Mic-in	MIC-in	MIC-in	MIC-in	MIC-in
USB 2.0/3.0	1 (1 in front)/4	1 (1 in front)/4	1 (1 in front)/4	1 (1 in front)/4
COM Port	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485
Power Switch	1	1	1	1
Remote Power Switch	3-pin	3-pin	3-pin	3-pin
Reset Button	1	1	1	1
Power Jack	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector	Terminal blocks 3-pin phoenix Connector
Expansion	2 x mini-PCIe/ 2 x PCI or PCIe slots	2 x mini-PCIe/ 2 x PCI or PCIe slots	2 x mini-PCIe/ 2 x PCI or PCIe slots	2 x mini-PCIe/ 2 x PCI or PCIe slots
Construction Front Panel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel
Mounting	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional	Optional
Operating Temp.	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
Storage Temp.	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66
Cut Out Size (W x H, mm)	382 x 312	382 x 312	434.4 x 358.9	434.4 x 358.9
Dimension (W x H x D, mm)	400 x 330 x 104.9	400 x 330 x 104.9	451 x 375.5 x 105	451 x 375.5 x 105
Net Weight (kg)	8.3	8.4	9.5	9.6
Certifications	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A

Industrial Panel PC

Model			
	IPPC A1970T-B	IPPCA1970T-JL	IPPC A1970P-B
LCD Size	19" 4:3	19" 4:3	19" 4:3
Max. Resolution	SXGA, 1280 x 1024	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m^2)	350	350	350
Contrast Ratio	1000	1000	1000
Viewing Angle (H-V)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED
LCD Color	16.7M	16.7M	16.7M
Touch Screen	Resistive 5-wire	Resistive 5-wire	10 x point P-Cap
Touch Light Transmission	80%	80%	87%
CPU	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket
Chipset	Intel® Q87	Intel® Q87	Intel® Q87
OS	WinXP, Win7, Win8	Win7, Win10	Win7, Win10
Memory	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L
CFast Socket	1	1	1
2nd Display Output	DVI-I+DP	DVI-I+DP	DVI-I+DP
PS2 KB/MS	1	1	1
Ethernet (10/100/1000)	2	2	2
Line-out	Line-out	Line-out	Line-out
Line-in	Line-in	Line-in	Line-in
Mic-in	MIC-in	MIC-in	MIC-in
USB 2.0/3.0	1 (1 in front)/4	1 (1 in front)/4	1 (1 in front)/4
COM Port	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485
Power Switch	1	1	1
Remote Power Switch	3-pin	3-pin	3-pin
Reset Button	1	1	1
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Expansion	2 x mini-PCIe/ 2xPCI or PCIe slots	-	2 x mini-PCIe/ 2xPCI or PCIe slots
Construction Front Panel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel
Mounting	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional
Operating Temp.	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP66	Front frame IP66	Front frame IP66
Cut Out Size (W x H, mm)	452 x 382	452 x 382	452 x 382
Dimension (W x H x D, mm)	470 x 400 x 104.9	470 x 400 x 104.9	470 x 400 x 104.9
Net Weight (kg)	10.3	10.1	10.4
Certifications	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A

Industrial Touch Monitor

Model				
	IPPC 1670P-B	IPPC 2170P-B	IPPD1600P-B	IPPD2100P-B
LCD Size	15.6" 16:9	21.5" 16:9	15.6" 16:9	21.5" 16:9
Max. Resolution	HD, 1366x768	Full HD, 1920 x 1080	HD, 1366 x 768	Full HD, 1920 x 1080
Panel			AUO: G156XW01 V1	AUO: G215HVN01.0
Luminance (cd/m^2)	400	300	400	300
Contrast Ratio	500	5000	500	5000
Viewing Angle (H-V)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	LED	LED	LED
LCD Color	16.7M	16.7M	16.7M	16.7M
Touch Screen	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap	10 x point P-Cap
Touch Light Transmission	87%	87%	87%	87%
CPU	4th gen. Intel® Core™ i5/i3 LGA1150 socket	4th gen. Intel® Core™ i5/i3 LGA1150 socket		
Chipset	Intel® Q87	Intel® Q87		
OS	Win7, Win10	Win7, Win10		
Memory	Max. 8GB DDR3/DDR3L	Max. 8GB DDR3/DDR3L		
CFast Socket	1	1		
2nd Display Output	DVI-I+DP	DVI-I+DP		
PS2 KB/MS	1	1		
Ethernet (10/100/1000)	2	2		
Line-out	Line-out	Line-out		
Line-in	Line-in	Line-in		
Mic-in	MIC-in	MIC-in		
USB 2.0/3.0	-/4	-/4		
COM Port	2 x RS232/422/485	2 x RS232/422/485		
Power Switch	1	1		
Remote Power Switch	3-pin	3-pin		
Reset Button	1	1		
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector		
Expansion	2 x mini-PCIe/ 2xPCI or PCIe slots	2 x mini-PCIe/ 2xPCI or PCIe slots		
Construction Front Panel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel	Aluminum front zero bezel
Mounting	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm	Panel/wall/stand/VESA 100 x 100mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 24V DC	+12 to 24V DC
Power Supply Adapter	Optional	Optional	Optional	Optional
Operating Temp.	-10°C to 50°C	-10°C to 50°C	-10°C to 60°C	-10°C to 60°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP66	Front frame IP66	Front frame IP66	Front frame IP66
Cut Out Size (W x H, mm)	398 x 293	544 x 364	398 x 293	544 x 364
Dimension (W x H x D, mm)	417.4 x 312.4 x 105.95	562.4 x 382.4 x 105.05	417.4 x 312.4 x 51.75	562.4 x 382.4 x 50.85
Net Weight (kg)	9.18	11.7	5.48	7.87
Certifications	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE; FCC Class B	CE; FCC Class B

Product Selection Guide

Applied Panel PC

Model			
	APPC 0840T	APPC1240T-B	APPC1245T-B
LCD Size	8.0" 4:3	12.1" 4:3	12.1" 4:3
Max. Resolution	SVGA, 800 x 600	SVGA, 800 x 600	XGA, 1024 x 768
Luminance (cd/m^2)	400	500	500
Contrast Ratio	500	700	700
Viewing Angle (H-V)	262K	16.7M	16.7M
Backlight	50(U), 70(D), 70(L), 70(R)	65(U), 75(D), 80(L), 80(R)	70(U), 70(D), 80(L), 80(R)
LCD Color	LED	LED	LED
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire
Touch Light Transmission	82%	80%	80%
CPU	Intel Atom® E3826 dual core 1.46GHz	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz
OS	Win7, Win10	Win7, Win10	Win7, Win10
Memory	2GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module
CF Socket	1	1	1
2nd Display Output	VGA	VGA	VGA
Ethernet (10/100/1000)	2	2	2
Line-out	Line out	Line out	Line out
USB 2.0/3.0	3/1	2/1	2/1
COM Port	2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485
Power Switch	1	1	1
Remote Power Switch	2-pin	2-pin	2-pin
Reset Button	1	1	1
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Expansion	1 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe
Construction Front Panel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel
Mounting	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional
Operating Temp.	-5°C to 50°C	-5°C to 60°C	-5°C to 60°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65
Cut Out Size (W x H, mm)	209.6 x 176.1	304.5 x 230	304.5 x 230
Dimension (W x H x D, mm)	217.4 x 176.4 x 68.9	317 x 243 x 65.5	317 x 243 x 65.5
Net Weight (kg)	2.3	3.6	3.6
Certification	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A

			
	APPC1540T-C	APPC1740T-B	APPC1940T-C
LCD Size	15" 4:3	17" 4:3	19" 4:3
Max. Resolution	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m^2)	400	350	350
Contrast Ratio	2500	800	1000
Viewing Angle (H-V)	88(U), 88(D), 88(L), 88(R)	60(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED
LCD Color	16.7M	16.7M	16.7M
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire
Touch Light Transmission	81%	81%	81%
CPU	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz
OS	Win7, Win10	Win7, Win10	Win7, Win10
Memory	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module
CF Socket	1	1	1
2nd Display Output	VGA	VGA	VGA
Ethernet (10/100/1000)	2	2	2
Line-out	Line out	Line out	Line out
USB 2.0/3.0	2/1	2/1	2/1
COM Port	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485	Isolation 2 x RS232/422/485
Power Switch	1	1	1
Remote Power Switch	2-pin	2-pin	2-pin
Reset Button	1	1	1
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Expansion	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe
Construction Front Panel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel
Mounting	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional
Operating Temp.	-5°C to 60°C	-5°C to 60°C	-5°C to 60°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65
Cut Out Size (W x H, mm)	371 x 297	399 x 329	436 x 366
Dimension (W x H x D, mm)	384.37 x 309.95 x 63	410.4 x 340.4 x 65.9	457.64 x 379.24 x 61.25
Net Weight (kg)	4.7	5.6	6.3
Certification	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A	CE: EN61000-6-2/4; FCC Class A

Applied Panel PC

Model			Coming soon
	APPC 3154	**APPC 5164P**	**APPC 5214P**
LCD Size	15" 4:3	15.6" 16:9	21.5" 16:9
Max. Resolution	XGA, 1024 x 768	HD, 1366 x 768	Full HD, 1920 x 1080
Luminance (cd/m^2)	350	400	250
Contrast Ratio	800	800	3000
Viewing Angle (H-V)	70(U), 80(D), 80(L), 80(R)	50(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	LED	LED
LCD Color	16.2M	16.7M	16.7M
Touch Screen	Resistive 5-wire	Ten Point P-Cap	Ten Point P-Cap
Touch Light Transmission	80%	80%	80%
CPU	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz	Intel® Celeron® J1900 quad core up to 2.0GHz
OS	Win7, Win10	Win7, Win10	Win7, Win10
Memory	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module
CF Socket	-	-	-
2nd Display Output	VGA	VGA	VGA
Ethernet (10/100/1000)	2	2	2
Line-out	Line out	Line out	Line out
USB 2.0/3.0	2/1	2/1	2/1
COM Port	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485
Power Switch	1	1	1
Remote Power Switch	2-pin	2-pin	2-pin
Reset Button	1	1	1
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Expansion	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe
Construction Front Panel	Full plastic	Full plastic	Full plastic
Mounting	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm
Power Input	+12 to 30V DC	+12 to 30V DC	+12 to 30V DC
Power Supply Adapter	Optional	Optional	Optional
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 50°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65
Cut Out Size (W x H, mm)	340 x 264	376.1 x 229.3	TBC
Dimension (W x H x D, mm)	359.8 x 282.7 x 60	394.81 x 247.99 x 60	539.04 x 330.5 x 65.8 (TBC)
Net Weight (kg)	3.3	4.3	5.5
Certification	CE: EN55024/32; FCC Class A	CE: EN55024/32; FCC Class A	CE: EN55024/32; FCC Class A

Applied Touch Monitor

Model				
	APPD 1205T	**APPD 1500T**	**APPD 1700T**	**APPD 1900T**
LCD Size	12.1" 4:3	15" 4:3	17" 4:3	19" 4:3
Max. Resolution	XGA, 1024 x 768	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m^2)	500	400	350	350
Contrast Ratio	700	2500	800	1000
Viewing Angle (H-V)	70(U), 70(D), 80(L), 80(R)	88(U), 88(D), 88(L), 88(R)	60(U), 80(D), 80(L), 80(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED	LED
LCD Color	16.7M	16.7M	16.7M	16.7M
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire
Touch Light Transmission	80%	81%	81%	81%
Touch Screen I/F	USB	USB	USB	USB
OSD Function	OSD keypad	OSD keypad	OSD keypad	OSD keypad
Video Input	VGA; DVI-D	VGA; DVI-D	VGA; DVI-D	VGA; DVI-D
Power Jack	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector	Terminal blocks 3-pin phoenix connector
Construction Front Panel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel	ABS+PC plastic front bezel
Mounting	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm	Panel/wall/stand/VESA 100 x 100 mm
Power Input	+12 to 24V DC	+12 to 24V DC	+12 to 24V DC	+12 to 24V DC
Power Supply Adapter	Optional	Optional	Optional	Optional
Operating Temp.	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C
Storage Temp.	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C	-20°C to 75°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing	10%~90%, non-condensing
IP Level	Front frame IP65	Front frame IP65	Front frame IP65	Front frame IP65
Cut Out Size (W x H, mm)	304.5 x 230	371 x 297	399 x 329	436 x 366
Dimension (W x H x D, mm)	317 x 243 x 53.5	384.37 x 309.95 x 51	410.4 x 340.4 x 53.9	457.64 x 379.24 x 49.15
Net Weight (kg)	2.8	3.9	4.8	5.5
Certifications	CE; FCC Class B	CE; FCC Class B	CE; FCC Class B	CE; FCC Class B

Product Selection Guide

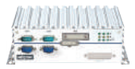
Fanless Computer

Model				
	NISE 50	NISE50-4G-32G	NISE 50W	NISE 50-J1900
CPU	Intel Atom® E3826 1.46GHz	Intel Atom® E3826 1.46GHz	Intel Atom® E3826 1.46GHz	Intel® Celeron® J1900 2.00GHz
Chipset	Intel® Bay Trail-I	Intel® Bay Trail-I	Intel® Bay Trail-I	Intel® Bay Trail-I
Max. Memory	2G DDR3L onboard (support 4G memory max)	4G DDR3L onboard (support 4G memory max)	2G DDR3L onboard (support 4G memory max)	DDR3L SODIMM socket (support 4G memory max)
HDD Space	-	-	1 x 2.5 SATA HDD bay	-
CFast Socket	-	-	-	-
eMMC	16GB	32GB	16GB	-
VGA	-	-	-	-
LVDS	-	-	-	-
DVI	-	-	-	-
HDMI	1	1	1	1
DisplayPort	-	-	-	-
USB	4 x USB 2.0	4 x USB 2.0	4 x USB 2.0	4 x USB 2.0
Serial Port	3	3	3	3
RS422/485	1	1	1	1
RS422/485 Isolation	-	-	-	-
mini-PCIe	3	3	3	3
M.2	-	-	-	-
SIM Card Holder	1	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Ports	2 x GbE	2x GbE	2 x GbE	2 x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
Power Input Range	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +12V
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	-	-	-	-
Win7 32-bit	-	V	V	V
Win7 64-bit	-	V	V	V
WES2009 32-bit	-	-	-	-
Win8 32-bit	V	V	V	-
Win8 64-bit	V	V	V	-
WinCE/WEC	-	-	-	-
Win10 32-bit	V	V	V	V
Win10 64-bit	V	V	V	V
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C
System Dimension (W x D x H, mm)	162 x 26 x 150	163 x 26 x 150	285 x 26 x 150	162 x 26 x 150
Carton Dimension (W x D x H, mm)	233 x 227 x 169	233x 227 x 169	346 x 265 x 200	233 x 227 x 169
Net Weight (kg)	0.87	0.87	1.4	0.87
Gross Weight (kg)	1.5	1.5	2.3	1.5

				
NISE 50-E3845	NISE 51	NISE105	NISE105-E3845	NISE105U
Intel Atom® E3845 1.91GHz	Intel® Celeron® N3350 2.40 GHz	Intel Atom® E3826 1.46GHz	Intel Atom® E3845 1.91GHz	Intel® Celeron® J1900 2.00GHz
Intel® Bay Trail-I	Intel® Apollo Lake	Intel® Bay Trail-I	Intel® Bay Trail-I	Intel® Bay Trail-I
DDR3L SODIMM socket (support 4G memory max)	8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L
-	-	1 x 2.5" SATA 2.0 HDD bay	1 x 2.5" SATA 2.0 HDD bay	1 x 2.5" SATA 2.0 HDD bay
-	-	1 (external, SATA 2.0 CFast)	1 (external, SATA 2.0 CFast)	-
-	16GB	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)
1	-	1	1	1
-	1	-	-	-
4 x USB 2.0	2 x USB 3.0 2 x USB 2.0	2 x USB 2.0 1 x USB 3.0	2 x USB 2.0 1 x USB 3.0	2 x USB 2.0 1 x USB 3.0
3	3	4	4	4
1	1	2	2	2
-	-	-	-	-
3	1	1	1	1
-	2	-	1	1
1	1	1	1	1
4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
ATX, DC +24V	ATX, DC +12V / +24V	ATX, DC + 9V ~ 30VDC	ATX, DC + 9V ~ 30VDC	ATX, DC + 9V ~ 30VDC
Optional	Optional	Optional	Optional	Optional
-	-	-	-	-
-	-	V	V	V
-	-	V	V	V
-	-	-	-	-
-	-	V	-	-
-	-	V	-	-
-	-	WinCE7.0	WinCE7.0	WinCE7.0
V	-	V	V	V
V	V	V	V	V
-5°C to 55°C	-5°C to 55°C	-20°C to 70°C	-5°C to 55°C	-5°C to 55°C
162 x 26 x 150	162 x 26 x 150	185 x 131 x 54	185 x 131 x 54	185 x 131 x 54
233 x 227 x 169	233x 227 x 169	259 x 233 x 129	259 x 233 x 129	259 x 233 x 129
0.87	0.87	1.3	1.3	1.3
1.5	1.5	2	2	2

Product Selection Guide

Fanless Computer

Model				
	NISE 106-N3160	**NISE 106-N3710**	**NISE 107**	**NISE 107-POE**
CPU	Intel® Celeron® N3160 1.6GHz	Intel® Pentium® N3710 1.6GHz	Intel Atom® E3930 1.30 GHz	Intel Atom® E3940 1.60 GHz
Chipset	Intel® Braswell	Intel® Braswell	Intel® Apollo Lake	Intel® Apollo Lake
Max. Memory	4GB DDR3L	4GB DDR3L	8GB DDR3L	8GB DDR3L
HDD Space	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA 2.0 HDD bay	1 x 2.5" SATA 2.0 HDD bay
CFast Socket	1 (external, CFast)	1 (external, CFast)	1 (External, M.2)	1 (external, M.2)
eMMC	-	-	-	-
VGA	-	-	-	-
LVDS	-	-	-	-
DVI	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)
HDMI	1	1	-	-
DisplayPort	1	1	1	1
USB	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0	4 x USB 3.0
Serial Port	4	4	2	4
RS422/485	2	2	2	2
RS422/485 Isolation	-	-	-	-
mini-PCIe	1	1	1	1
M.2	-	-	1 (external)	1 (external)
SIM Card Holder	1	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Ports	2 x GbE	2 x GbE	2 x GbE	2 x GbE with 1x PoE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
Power Input Range	ATX, DC + 9V ~ 30VDC	ATX, DC + 9V ~ 30VDC	ATX, DC + 9V ~ 30VDC	ATX, DC + 9V ~ 30VDC
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	-	-	-	-
Win7 32-bit	V	V	-	-
Win7 64-bit	V	V	-	-
WES2009 32-bit	-	-	-	-
Win8 32-bit	V	V	-	-
Win8 64-bit	V	V	-	-
WinCE/WEC	-	-	-	-
Win10 32-bit	V	V	-	-
Win10 64-bit	V	V	V	V
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55°C	-5°C to 55°C	-20°C to 70°C	-5°C to 55°C
System Dimension (W x D x H, mm)	185 x 131 x 54	185 x 131 x 54	185 x 131 x 54	185 x 131 x 69
Carton Dimension (W x D x H, mm)	245 x 318 x 152	245 x 318 x 152	259 x 233 x 129	259 x 233 x 144
Net Weight (kg)	1.3	1.3	1.3	2
Gross Weight (kg)	2	2	2	2.5

					
NISE 2400	**NISE 2400-J1900**	**NISE 2410**	**NISE 2410-J1900**	**NISE 2410E**	**NISE 2420**
Intel Atom® E3827 1.75GHz	Intel Atom® J1900 2.0GHz	Intel Atom® E3827 1.75GHz	Intel Atom® J1900 2.0GHz	Intel Atom® E3845 1.91GHz	Intel Atom® E3845 1.91GHz
Intel® Bay Trail-I	Intel® Bay Trail-D	Intel® Bay Trail-I	Intel® Bay Trail-D	Intel® Bay Trail-I	Intel® Bay Trail-I
8GB DDR3L	8GB DDR3L	8GB DDR3	8GB DDR3L	8GB DDR3	8GB DDR3
1 x 2.5" SATA II HDD bay	1 x 2.5" SATA II HDD bay	1 x 2.5" SATA II HDD bay	1 x 2.5" SATA II HDD bay	1 x 2.5" SATA II HDD bay	1 x 2.5" SATA II HDD bay
1 (external, CFast)	1 (external, CFast)	1 (external, CFast)	1 (external, CFast)	1 (external, CFast)	1 (external, CFast)
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)	1 (DVI-I)
1	1	1	1	1	1
-	-	-	-	-	-
4 x USB 2.0 1 x USB 3.0	4 x USB 2.0 1 x USB 3.0	4 x USB 2.0 1 x USB 3.0	4 x USB 2.0 1 x USB 3.0	4 x USB 2.0 1 x USB 3.0	4 x USB 2.0 1 x USB 3.0
4	4	4	4	4	4
2	2	2	2	2	2
-	-	-	-	-	-
2	2	2	2	2	2
-	-	-	-	-	-
1	1	1	1	1	1
4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V
Optional	Optional	Optional	Optional	Optional	Optional
-	-	1 x PCI	1 x PCI	1 x PCIe	2 x PCI
V	V	V	V	V	V
V	V	V	V	V	V
-	-	-	-	-	-
V	V	V	V	V	V
V	V	V	V	V	V
WinCE 7.0	WinCE 7.0	WinCE 7.0	WinCE 7.0	WinCE 7.0	WinCE 7.0
V	V	V	V	V	V
V	V	V	V	V	V
-20°C to 70°C	-5°C to 55°C	-20°C to 70°C	-5°C to 55°C	-20°C to 70°C	-20°C to 70°C
195 x 200 x 65	195 x 200 x 65	195 x 200 x 90	195 x 200 x 90	195 x 200 x 90	195 x 200 x 111
335 x 294 x 193	335 x 294 x 193	335 x 294 x 193	335 x 294 x 193	335 x 294 x 193	337 x 296 x 227
2.7	2.7	3	3	3	3.2
4	4	4.4	4.4	4.4	4.6

Product Selection Guide

Fanless Computer

Model				
	NISE 3700E	**NISE 3700E2**	**NISE 3700P2**	**NISE 3700P2E**
CPU	4th Gen. Intel® Core™ i7/i5/i3 LGA socket	4th Gen. Intel® Core™ i7/i5/i3 LGA socket	4th Gen. Intel® Core™ i7/i5/i3 LGA socket	4th Gen. Intel® Core™ i7/i5/i3 LGA socket
Chipset	Intel® Q87 PCH	Intel® Q87 PCH	Intel® Q87 PCH	Intel® Q87 PCH
Max. Memory	8GB DDR3/DDR3L	8GB DDR3/DDR3L	8GB DDR3/DDR3L	8GB DDR3/DDR3L
HDD Space	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay	1x 2.5" SATA HDD bay
CFast Socket	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)	1 (External, CFast)
eMMC	-	-	-	-
VGA	-	-	-	-
LVDS	-	-	-	-
DVI	1 (DVI-I)/1 (DVI-D)	1 (DVI-I)/1 (DVI-D)	1 (DVI-I)/1 (DVI-D)	1 (DVI-I)/1 (DVI-D)
HDMI	1	1	1	1
DisplayPort	-	-	-	-
USB	4 x USB 2.0 4 x USB 3.0	4 x USB 2.0 4 x USB 3.0	4 x USB 2.0 4 x USB 3.0	4 x USB 2.0 4 x USB 3.0
Serial Port	3	3	3	3
RS422/485	2	2	2	2
RS422/485 Isolation	-	-	-	-
mini-PCIe	2	2	2	2
M.2	-	-	-	-
SIM Card Holder	1	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Ports	3 x GbE	3 x GbE	3 x GbE	3 x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
Power Input Range	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	1 x PCIe x4	2 x PCIe x4	2 x PCI	1 x PCI and 1 x PCIe x4
Win7 32-bit	V	V	V	V
Win7 64-bit	V	V	V	V
WES2009 32-bit	-	-	-	-
Win8 32-bit	V	V	V	V
Win8 64-bit	V	V	V	V
WinCE/WEC	V	V	V	V
Win10 32-bit	V	V	V	V
Win10 64-bit	V	V	V	V
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C
System Dimension (W x D x H, mm)	215 x 272 x 93	215 x 272 x 114	215 x 272 x 114	215 x 272 x 114
Carton Dimension (W x D x H, mm)	378 x 342 x 269	378 x 342 x 269	378 x 342 x 269	378 x 342 x 269
Net Weight (kg)	4.5	5	5	5
Gross Weight (kg)	5.9	6.4	6.4	6.4

			
NISE 3720E	**NISE 3720E2**	**NISE 3720P2**	**NISE 3720P2E**
Onboard Intel® Core™ i7 processor (i7-5650U)	Onboard Intel® Core™ i7 processor (i7-5650U)	Onboard Intel® Core™ i7 processor (i7-5650U)	Onboard Intel® Core™ i7 processor (i7-5650U)
Broadwell MCP	Broadwell MCP	Broadwell MCP	Broadwell MCP
8GB DDR3L	8GB DDR3L	8GB DDR3L	8GB DDR3L
1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
1 (external, CFast)	1 (external, CFast)	1 (external, CFast)	1 (external, CFast)
-	-	-	-
1 (from DVI-I , needs adapter)	1 (from DVI-I , needs adapter)	1 (from DVI-I , needs adapter)	1 (from DVI-I , needs adapter)
-	-	-	-
1 (DVI-I)/1 (DVI-D)	1 (DVI-I)/1 (DVI-D)	1 (DVI-I)/1 (DVI-D)	1 (DVI-I)/1 (DVI-D)
-	-	-	-
-	-	-	-
2 x USB 2.0 2 x USB 3.0 2 x Internal USB 2.0 (7-Pin JST)	2 x USB 2.0 2 x USB 3.0 2 x Internal USB 2.0 (7-Pin JST)	2 x USB 2.0 2 x USB 3.0 2 x Internal USB 2.0 (7-Pin JST)	2 x USB 2.0 2 x USB 3.0 2 x Internal USB 2.0 (7-Pin JST)
6 (COM3-6: internal box header with RS232)	6 (COM3-6: internal box header with RS232)	6 (COM3-6: internal box header with RS232)	6 (COM3-6: internal box header with RS232)
2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)	2 (RS232/422/485)
-	-	-	-
2 (mSATA/PCIe option)	2 (mSATA/PCIe option)	2 (mSATA/PCIe option)	2 (mSATA/PCIe option)
-	-	-	-
1	1	1	1
4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
2x GbE	2x GbE	2x GbE	2x GbE
Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
ATX, DC +24V	ATX, DC +24V	ATX, DC +24V	ATX, DC +24V
Optional	Optional	Optional	Optional
1 x PCIe x4	2 x PCIe x4	2 x PCI	1 x PCI and 1 x PCIe x4
V	V	V	V
V	V	V	V
-	-	-	-
V	V	V	V
V	V	V	V
-	-	-	-
-	-	-	-
-	-	-	-
-20°C to 60°C	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
215 x 272 x 93	215 x 272 x 114	215 x 272 x 114	215 x 272 x 114
378 x 342 x 269	378 x 342 x 269	378 x 342 x 269	378 x 342 x 269
4.5	5	5	5
5.9	6.4	6.4	6.4

Product Selection Guide

Fanless Computer

Model					
	NISE 3800E	**NISE 3800E2**	**NISE 3800P2**	**NISE 3800P2E**	**NISE 3800R**
CPU	6th Gen. Intel® Core™ i7/i5/i3 LGA socket	6th Gen. Intel® Core™ i7/i5/i3 LGA socket	6th Gen. Intel® Core™ i7/i5/i3 LGA socket	6th Gen. Intel® Core™ i7/i5/i3 LGA socket	6th Gen. Intel® Core™ i7/i5/i3 LGA socket
Chipset	Intel® Q170 PCH	Intel® Q170 PCH	Intel® Q170 PCH	Intel® Q170 PCH	Intel® Q170 PCH
Max. Memory	16GB DDR4	16GB DDR4	16GB DDR4	16GB DDR4	16GB DDR4
HDD Space	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	2 x 2.5" SATA HDD bay
CFast Socket	1 (external, M.2)	1 (external, M.2)	1 (external, M.2)	1 (external, M.2)	1 (external, M.2)
eMMC	-	-	-	-	-
VGA	-	-	-	-	-
LVDS	-	-	-	-	-
DVI	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)
HDMI	1	1	1	1	1
DisplayPort	1	1	1	1	1
USB	4 x USB 3.0 2 x USB 2.0	4 x USB 3.0 2 x USB 2.0	4 x USB 3.0 2 x USB 2.0	4 x USB 3.0 2 x USB 2.0	4 x USB 3.0 2 x USB 2.0
Serial Port	2	2	2	2	2
RS422/485	2	2	2	2	2
RS422/485 Isolation	2	2	2	2	2
mini-PCIe	2	2	2	2	2
M.2	1	1	1	1	1
SIM Card Holder	1	1	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)
LAN Ports	3x GbE	3x GbE	3x GbE	3x GbE	3x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out
Power Input Range	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional
Expansion	1 x PCIe x4	2 x PCIe x4	2 x PCI	1 x PCI and 1 x PCIe x4	-
Win7 32-bit	V	V	V	V	V
Win7 64-bit	V	V	V	V	V
WES2009 32-bit	-	-	-	-	-
Win8 32-bit	-	-	-	-	-
Win8 64-bit	V	V	V	V	V
WinCE/WEC	V	V	V	V	V
Win10 32-bit	-	-	-	-	-
Win10 64-bit	V	V	V	V	V
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C
System Dimension (W x D x H, mm)	215 x 272 x 93	215 x 272 x 114	215 x 272 x 114	215 x 272 x 114	215 x 272 x 93
Carton Dimension (W x D x H, mm)	378 x 342 x 269	378 x 342 x 269	378 x 342 x 269	378 x 342 x 269	378 x 342 x 269
Net Weight (kg)	4.5	5	5	5	4.5
Gross Weight (kg)	5.9	6.4	6.4	6.4	5.9

				
	NISE 3900E	**NISE 3900E2**	**NISE 3900P2E**	**NISE 4200**
CPU	8th Gen. Intel® Core™ i7/i5/i3 LGA socket	8th Gen. Intel® Core™ i7/i5/i3 LGA socket	8th Gen. Intel® Core™ i7/i5/i3 LGA socket	6th Gen. Intel® Core™ i5/i3 BGA
Chipset	Intel® Q370 PCH	Intel® Q370 PCH	Intel® Q370 PCH	Intel® HM170 PCH
Max. Memory	16GB DDR4	16GB DDR4	16GB DDR4	16GB DDR4
HDD Space	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay	1 x 2.5" SATA HDD bay
CFast Socket	-	-	-	-
eMMC	-	-	-	-
VGA	-	-	-	-
LVDS	-	-	-	-
DVI	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)	1 (DVI-D)
HDMI	1	1	1	-
DisplayPort	1	1	1	2
USB	6 x USB 3.0 4 x USB 2.0	6 x USB 3.0 4 x USB 2.0	6 x USB 3.0 4 x USB 2.0	4 x USB 3.0 2 x USB2.0
Serial Port	4 (internal)	4 (internal)	4 (internal)	6
RS422/485	2	2	2	2
RS422/485 Isolation	2	2	2	2
mini-PCIe	1	1	1	2
M.2	1 (external) 1 (internal)	1 (external) 1 (internal)	1 (external) 1 (internal)	1 (Internal)
SIM Card Holder	1	1	1	1
GPIO	4-in/4-out (internal)	4-in/4-out (internal)	4-in/4-out (internal)	8-in/8-out (internal)
LAN Ports	3 x GbE	3 x GbE	3 x GbE	2 x GbE
Audio	Mic-in & Line-out	Mic-in & Line-out	Mic-in & Line-out	Mic-in (internal) Line-out (external)
Power Input Range	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, DC +9 ~ 30V	ATX, 12V+/- 20% 24V +/- 20%
Power Supply Adapter	Optional	Optional	Optional	Optional
Expansion	1 x PCIe x4	2 x PCIe x4	1 x PCI and 1 x PCIe x4	-
Win7 32-bit	-	-	-	V
Win7 64-bit	-	-	-	V
WES2009 32-bit	-	-	-	-
Win8 32-bit	-	-	-	-
Win8 64-bit	-	-	-	-
WinCE/WEC	-	-	-	-
Win10 32-bit	-	-	-	-
Win10 64-bit	V	V	V	V
Operating temp. (w/ HDD) Based on IEC 60068 STD	-5°C to 55°C	-5°C to 55°C	-5°C to 55°C	-20°C to 70°C
System Dimension (W x D x H, mm)	215 x 272 x 93	215 x 272 x 114	215 x 272 x 114	269 x 157 x 56
Carton Dimension (W x D x H, mm)	378 x 342 x 269	378 x 342 x 269	378 x 342 x 269	351 x 239 x 212
Net Weight (kg)	4.5	5	5	2.1
Gross Weight (kg)	5.9	6.4	6.4	2.8

Intelligent Kiosk Solution

Model	 IKS 614A	 IKS 614B	 IKS 621A
Form Factor	Fanless with miniITX	Fanless with miniITX	Fanless with miniITX
Processor	Intel® 6th gen. Skylake-U Core™ processors	Intel® 6th gen. Core™ i7/i5/i3, LGA1151 socket processor, max. 35W TDP	Intel® Celeron® N series processors
CPU/Speed Cores/ TDP	Intel® Celeron® 3955U, up to 2.0GHz,15W,2M L2 cache	Intel® Core™ i7-6700TE/i7-7700T, Intel® Core™ i5-6500TE/i5-7500T, Intel® Core™ i3-6100TE/i3-7101TE, support LGA1151 CPU, TDP 35W	Intel® Celeron® N3060 dual processor, up to 2.48G,6W,2M L2 cache
Chipset	Intel® Skylake-U	Intel® H110 PCH	Intel® Braswell
Max. Memory	2 x DDR4 SO-DIMM 32GB max.	2 x DDR4 SO-DIMM 32GB max.	1 x DDR3L SO-DIMM 8GB max.
DVI/DP/HDMI	0/1/1	0/0/2	1/0/0
VGA	0	0	1
LVDS/eDP	Dual,18/24 LVDS (internal)	Dual,18/24-bit LVDS (internal)	Dual,18/24-bit LVDS (internal)
Graphics Engine	Intel® Skylake Integrated graphics	Intel® Skylake Integrated graphics	Braswell series integrated graphic engine, gen. 8
Storage	Support one 2.5" SATA SSD (option)	Support one 2.5" SATA SSD (option)	Support one 2.5" SATA SSD (option)
SATA2.0/3.0	1 x SATA 3.0	2 x SATA 3.0	1 x SATA 3.0
LAN Port	2 x Realtek RTL8111G	2 x Realtek RTL8111G	2 x Realtek RTL8111G
USB2.0/3.0	4 x USB 3.0, 1 x USB 2.0	4 x USB 3.0, 1 x USB 2.0	4 x USB3.0, 1 x USB2.0
Serial Port (total)	4	2	5
RS422/485 Support	1	1	1
Audio	1 x Line-out	1 x Line-out, 1 x MIC-in	1 x Line-out, 1 x MIC-in
Expansion	1 x mini-PCIe (F/S)(mSATA) 1 x mini-PCIe (H/S)(PCIe/USB)	1 x M.2 M-key (2280) 1 x mini-PCIe (F/S)(PCIe/USB)	1 x M.2 M-key (2280) 1 x mini-PCIe (F/S)(PCIe/USB)
Operating Temperature	0°C to 50°C	0°C to 50°C	0°C to 50°C
Power Input Range	DC 12V	DC 12V	DC 12V
Power Supply Adapter	YES	YES	YES
System Dimension (W x D x H, mm)	External AC DC 12V/5A 60W power adapter	External AC DC 12V/7A 84W power adapter	External AC DC 12V/5A 60W power adapter
OS Support	Win 10 64-bit	Win 10 64-bit	Win 10 64-bit

Digital Signage Player

Fan | Fanless | 4K Resolution

Number of Display Outputs	Processor \ Output Platform	HDMI	DP	VGA	DVI	Multimedia Support	Recommended Model
1	ARM®	1				4K Full HD 1080 Flash	NDiS B115
2	Intel® Celeron®	1		1		Full HD 1080 Flash	NDiS B325
		2				Full HD 1080 Flash	NDiS M324
		1		1		4K Full HD 1080 Flash	NDiS B327
		2				4K Full HD 1080 Flash	Neu-X100
		2				4K Full HD 1080 Flash	NDiS B325-SI3, NDiS B325-SI5, NDiS B537, NDiS B328-KI3
3	Intel® Celeron®	3				4K Full HD 1080 Flash	NDiS M335
	Intel Atom®	2	1			4K Full HD 1080 Flash	NDiS B336R
	Intel® Core™ i	2				4K Full HD 1080 Flash	NDiS M533
		2	1			4K Full HD 1080 Flash	NDiS M535, NDiS B537-I
		1	2			4K Full HD 1080 Flash	NDiS M537, NDiS S538
		3				4K Full HD 1080 Flash	NDiS B533, NDiS B535
6	Intel® Core™ i	6				4K Full HD 1080 Flash	NDiS B866

Product Selection Guide

Value Digital Signage Player

Model			
	NDiS B115	**NDiS B325**	**NDiS B327**
CPU	Rockchip RK3288	Intel® Celeron® N3150/ Intel® Core i3-6100U/ Intel® Core™ i5-6200U	Intel® Celeron® N3060
Chipset	Embedded	N/A	N/A
Graphic	MaliT760 (embedded)	Intel® HD Graphics/ Intel® HD 520 Graphics/ Intel® HD 520 Graphics	Intel® HD 400 Graphics
RAM	DDR3 2GB on board	DDR3L SO-DIMM, up to 8GB/ DDR4 SO-DIMM, up to 8GB/ DDR4 SO-DIMM, up to 8GB	DDR3L SO-DIMM, up to 8GB
LAN	1 x 10/100/1000Mbps	1 x 10/100/1000Mbps	1 x 10/100/1000Mbps
WLAN	Onboard 802.11 b/g/n	Optional	Optional
Hard Disk	N/A	1 x 2.5" SATA	1 x 2.5" SATA
Flash Storage	eMMC2 16GB on board	N/A	NGFF (M2) 22 x 42 (SATA)
Video Output	1 x HDMI (2.0)	1 x VGA, 1 x HDMI/ 2 x HDMI/ 2 x HDMI	1 x VGA, 1 x HDMI
Display Resolution	3840 x 2160	VGA: 1920 x 1080 HDMI: 3840 x 2160	VGA: 1920 x 1200 HDMI: 3840 x 2160
Output Channel	1 independent	2 independent or clone	2 independent or clone
Video Capability	Hardware decode: MPEG1,MPEG2,VC1 H.264,H.265,VP9	Hardware decode: MPEG1, MPEG2,VP8 VC1, H.264, H.265	Hardware decode: MPEG1, MPEG2,VP8 VC1, H.264, H.265
Audio Output	1 x Line-out	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in
TV Tuner	N/A	Optional	N/A
RS-232	1 (UART)	1	1
USB 2.0	2	2	2
USB 3.0	N/A	4	2
Expansion Slot	N/A	1 x mini-PCIe/ 1 x NGFF (M2) 2230/ 1 x NGFF (M2) 2230	1 x mini-PCIe
Operating Temperature	-10°C to 50°C	-20°C to 50°C	0°C to 40°C
Power Type	5V DC	19V DC	19V DC
Dimension (W x D x H, mm)	118 x 101 x 23.6	224.34 x 147.4 x 29	190 x 149 x 25
OS Support	Android 4.4	Win7/WES7/ WE8S/Win10/Linux	Win7/Win10

			
	NDiS B328-KI3	**NDiS B336R**	**Neu-X100**
CPU	Intel® Core™ i3-7100U	Intel Atom® E3950	Intel® Celeron® N3350, Intel® Celeron® N4200
Chipset	N/A	N/A	N/A
Graphic	Intel® HD620 Graphics	Intel® Gen. 9 Graphics	Intel® HD 500 Graphics/ Intel® HD505 Graphics
RAM	DDR4 SO-DIMM, up to 32GB	2 x DDR3L SO-DIMM, up to 16GB	DDR3L SO-DIMM, up to 8GB
LAN	1 x 10/100/1000Mbps	1 x 10/100/1000Mbps	1 x 10/100/1000Mbps
WLAN	Optional	Optional	Optional
Hard Disk	1 x 2.5" SATA	1 x2.5" SATA	N/A
Flash Storage	NGFF (M2) 22 x 80 (SATA)	N/A	NGFF (M2) 22 x 42 (SATA)
Video Output	2 x HDMI	1 x DP, 2 x HDMI	2 x HDMI
Display Resolution	3840 x 2160	3840 x 2160	4096 x 2160
Output Channel	2 independent or clone	3 independent or clone	2 independent or clone
Video Capability	Hardware decode: MPEG1, MPEG2,VP8 VC1, H.264, H.265	Hardware decode: MPEG1, MPEG2,VP8 VC1, H.264, H.265	Hardware decode:HEVC (H.265), H.264, MVC, VP8, VP9, MPEG2, VC-1, WMV9, JPEG/MJPEG
Audio Output	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in	1x Line-out
TV Tuner	N/A	Optional	N/A
RS-232	1	1	2
USB 2.0			
USB 3.0	4	5	2
Expansion Slot	1 x NGFF (M2) 2230	1 x mini-PCIe 1 x NGFF (M2) 2230	1 x NGFF (M2) 2230
Operating Temperature	-20°C~50°C	-20°C to 60°C	-5°C~50°C
Power Type	19V DC	19V DC	19V DC
Dimension (W x D x H, mm)	224.34 x 147.4 x 29	259 x 147.4 x 21	152 x 108 x 375
OS Support	Win10	Win10/Linux	Win10/Linux

High-Performance Digital Signage Player

Model			
	NDiS B533	**NDiS B535**	**NDiS B537/B537-I**
CPU	4th gen. Intel® Core™ LGA socket type processor	6th gen. Intel® Core™ LGA socket type processor (up to 35W)	7/6th gen. Intel® Core™ LGA socket type processor (up to 35W)
Chipset	Intel® Q87	Intel® Q170 PCH	Intel® H110 PCH (B537)/ Intel® Q170 PCH (B573-I)
Graphic	Intel® integrated HD 4600 graphic engine	Intel® integrated HD 530 graphic engine	Intel® integrated HD 600 series
RAM	2 x DDR3 SO-DIMM, up to 16GB	2 x DDR4 SO-DIMM, up to 32GB	2 x DDR4 SO-DIMM, up to 32GB
LAN	2 x 10/100/1000Mbps	2 x 10/100/1000Mbps	2 x, 10/100/1000Mbps (B537)/ 2 x, 10/100/1000Mbps (B537-I)
WLAN	Optional	Optional	Optional
Hard Disk	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA
Flash Storage	SATA DOM	NGFF (M2) 22 x 42/22 x 80	N/A
Video Output	3 x HDMI	3 x HDMI(2.0)	B537: 1 x HDMI, 1 x HDMI (2.0)/ B537-I: 1 x HDMI, 1 x HDMI (2.0), 1 x DisplayPort
Display Resolution	3840 x 2160	3840 x 2160	Up to 3840 x 2160
Output Channel	3 independent or clone	3 independent or clone	2 independent or clone/ 3 independent or clone
Video Capability	Hardware decode: MPEG1, MPEG2, VC1, H.264	Hardware decode: MPEG2,VC1, VP8, H.264, H/265	Hardware decode: MPEG2,VC1, VP9, H.264, H/265
Audio Output	1 x S/PDIF, 1 x Line-in, 1 x Line-out	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in
TV Tuner	Optional	Optional	Optional
RS-232	2	4	2
USB 2.0	N/A	N/A	N/A
USB 3.0	4	6	4
Expansion Slot	2 x mini-PCIe	1 x mini-PCIe 1 x NGFF (M2) 2230	1 x mini-PCIe 1 x NGFF (M2) 2230
Operating Temperature	0°C to 40°C	0°C to 40°C	-10°C to 45°C
Power Type	12V DC	12V DC	12V DC
Dimension (W x D x H, mm)	294 x 198 x 52	294 x 198 x 52	295 x 189.9 x 33
OS Support	Win7/XP/WES7/ WE8S/WES2009/Win10/Linux	Win7/WES7/ WE8S/Win10/ Linux	Win10/Linux

Digital Signage Player Appliance

Model		
	PDSB 325	**PDSB 535**
Storage	320GB HDD	320GB HDD
LAN	1 x 10/100/1000Mbps	2 x 10/100/1000Mbps
WLAN	Optional	Optional
Video Output	1 x VGA, 1 x HDMI	3 x HDMI
Display Resolution	4K2K	4K2K
Output Channel	2 independent, expanded or clone	3 independent, expanded or clone
Video Capability	Hardware decode: H.265/HEVC4, H.264, MPEG2, MVC, VC-1, WMV9, JPEG, VP8 Quality: 1 x 4K2K or 2x 720p	Hardware decode & encode: MPEG1, MPEG2, VC1, H.264 Quality: 3 x 4K2K
Graphic Capability	4K2K Raster image with advanced transition/ animated effect	4K2K Raster image with advanced transition/ animated effect
Audio Output	1 x Line-out, 1 x Mic-in	1 x Line-out, 1 x Mic-in
TV Tuner	Optional	Optional
RS232	1	1
USB 2.0/3.0	2 x USB 2.0 4 x USB 3.0	4 x USB 3.0
Power Type	19V DC	12V DC
Dimension (W x D x H, mm)	226.34 x 147.4 x 29	294 x 198 x 52
Content Support	Video, image, flash, RSS news, web URL, scrolling text, live TV	
Multimedia Format Support	Video: MPEG 1/2/4, AVI, WMV, DivX, XVID, VOB, MOV VC-1, H.264, rm, rmvb Audio: MIDI, MPEG-1-audio layerII (MP2), mp3, SND, M4A, AAC, wav, wma, ogg, ra Flash: SWF, FLV Graphic: JPG, BMP, PNG, ICO, ICP, GIF, TIFF, WMF	
Streaming Protocol Support	http, mms, udp, rtp, rtsp, IPTV	
Max. Number of Zones	9	9

Multi-Display Player

Model	
	NDiS B866
CPU	6th gen. Intel® Core™ LGA socket type processor (up to 65W)
Chipset	Intel® Q170 PCH
Graphic	AMD Radeon™ E8870
RAM	4 x DDR4 SO-DIMM, up to 64GB
LAN	2 x 10/100/1000Mbps
Hard Disk	2 x 2.5" SATA
Flash Storage	N/A
Video Output	6 x HDMI 2.0
Display Resolution	3840 x 2160
Output Channel	6 independent, expanded or clone
Video Capability	Hardware decode: MPEG1, MPEG2, VC1, H.264
Audio Output	1 x S/PDIF, 1 x MIC-in, 1 x Line-out
TV Tuner	Optional
RS-232	2
USB 2.0	N/A
USB 3.0	6
Expansion Slot	1 x mini-PCIe 2 x NGFF (M Key supports 2242, 2280) 1 x NGFF (E Key supports 1630, 2230)
Operating Temperature	0°C to 40°C
Power Type	300W ATX power supply
Dimension (W x D x H, mm)	428 x 344 x 44
OS Support	Win/Win8.1/Win10/Linux

OPS Module Player

Model			
	NDiS M324	**NDiS M335**	**NDiS M533**
CPU	Intel® Celeron® processor J1900	Intel® Celeron® N3160	4th gen. Intel® Core™ i3-4100/i5-4400E/ i7-4700EQ processor
Chipset	N/A	N/A	Intel® QM87
Graphic	Intel® gen. 7 graphics	Intel® HD Graphics	Intel® integrated HD 4600 graphic engine
RAM	2 x DDR3L SO-DIMM, up to 8GB	2 x DDR3L SO-DIMM, up to 8GB	2 x DDR3L SO-DIMM, up to 16GB
LAN	1 x 10/100/1000Mbps	1 x 10/100/1000Mbps	1 x 10/100/1000Mbps
WLAN	Optional	Optional	Optional
Hard Disk	1 x 2.5" SATA	1 x 2.5" SATA	1 x 2.5" SATA
Flash Storage	N/A	NGFF (M2) 22 x 42 (SATA)	N/A
Video Output	1 x HDMI, 1 x TMDS (via JAE connector)	2 x HDMI, 1 x TMDS (via JAE connector)	1 x HDMI, 1 x TMDS (via JAE connector), 1 x DP (via JAE connector)
Display Resolution	1920 x 1080	HDMI1: 1920 x 1080 HDMI2: 3840 x 2160 TMDS(via JAE): 3840 x 2160	3840 x 2160
"Output Channel "	2 independent or clone	3 independent or clone	2 independent or clone
Video Capability	Hardware decode: MPEG2/4, VC1, H.264, VP8	Hardware decode: MPEG1, MPEG2,VP8 VC1, H.264, H.265	Hardware decode: MPEG2, VC1, H.264
Audio Output	1 x Mic-in, 1 x Line-out, 1 x Line-out (via JAE connector)	1 x Mic-in, 1 x Line-out, 1 x Line-out (via JAE connector)	1 x Mic-in, 1 x Line-out, 1 x Line-out (via JAE connector)
TV Tuner	Optional	Optional	Optional
RS-232	1 x TX/RX (via JAE connector)	1 x TX/RX (via JAE connector)	1 x RJ45, 1 x TX/RX (via JAE connector)
USB 2.0	3 (1 x external, 2 x via JAE connector)	4 (2 x external, 2 x via JAE connector)	2 (2 x via JAE connector)
USB 3.0	4 (3 x external, 1 x via JAE connector)	3 (2 x external, 1 x via JAE connector)	5 (4 x external, 1 x via JAE connector)
Expansion Slot	1 x mini-PCIe	1 x mini-PCIe	1 x mini-PCIe
Operating Temperature	0°C to 45°C	0°C to 45°C	0°C to 45°C
Power Type	12-19V DC (via JAE connector)	12-19V DC (via JAE connector)	12-19V DC (via JAE connector)
Dimension (W x D x H, mm)	200 x 119 x 30	200 x 119 x 30	200 x 119 x 30
OS Support	Win7/WES7/WE8S/Linux	Win7/WES7/ WE8S/Win10/Linux	Win7/XP/WES7/ WE8S/WES2009/Linux

Model		
	NDiS M535	**NDiS M537 (OPS+)**
CPU	6th gen. Intel® Core™ i5-6440EQ/i7-6820EQ BGA type processor	7/6th gen. Intel® Core™ LGA socket type processor (up to 35W)
Chipset	Intel® QM170 PCH	Intel® QM170 PCH
Graphic	Intel® integrated HD 530 graphic engine	Intel® integrated HD 600 series
RAM	2 x DDR4 SO-DIMM, up to 32GB	2 x DDR4 SO-DIMM, up to 32GB
LAN	1 x 10/100/1000Mbps	1 x 10/100/1000Mbps
WLAN	Optional	N/A
Hard Disk	1 x 2.5" SATA	N/A
Flash Storage	N/A	NGFF (M2) 22 x 42 (SATA)
Video Output	1 x HDMI (2.0), 1 x mini DP, 1 x TMDS (HDMI2.0) (via JAE connector)	1 x mini DP, 1 x TMDS (HDMI 2.0) (via JAE connector), 1 x DP (via FX18)
Display Resolution	3840 x 2160	3840 x 2160
"Output Channel "	3 independent or clone	3 independent or clone
Video Capability	Hardware decode: MPEG2,VC1, VP8, H.264, H/265	Hardware decode: MPEG2,VC1, VP9, H.264, H/265
Audio Output	1 x Mic-in, 1 x Line-out, 1 x Line-out (via JAE connector)	1 x Mic-in, 1 x Line-out, 1 x Line-out (via JAE connector)
TV Tuner	Optional	N/A
RS-232	1 x TX/RX (via JAE connector)	1 x TX/RX (via JAE connector)
USB 2.0	2 (2 x via JAE connector)	2 (2 x via JAE connector)
USB 3.0	3 (2 x external, 1 x via JAE connector)	3 (2 x external, 1 x via JAE connector)
Expansion Slot	1 x mini-PCIe	1 x M.2 2230
Operating Temperature	0°C to 45°C	0°C to 45°C
Power Type	12-19V DC (via JAE connector)	12-19V DC (via JAE connector)
Dimension (W x D x H, mm)	200 x 119 x 30	200 x 119 x 30
OS Support	Win7/WES7 WE8S/Win10/Linux	Win10/Linux

SDM Module Player

Model	
	NDiS S538 (SDM-L)
CPU	6th gen. Intel® Core™ LGA socket type processor (up to 35W)
Chipset	Intel® QM170 PCH
Graphic	Intel® integrated HD 600 series
RAM	2 x DDR4 SO-DIMM, up to 16GB
LAN	1 x 10/100/1000Mbps
WLAN	N/A
Hard Disk	N/A
Flash Storage	NGFF (M2) 22 x 80
Video Output	1 x mini DP, 1 x TMDS (HDMI 2.0) (via JAE connector), 1 x DP (via FX18)
Display Resolution	3840 x 2160
"Output Channel "	3 independent or clone
Video Capability	Hardware decode: MPEG2,VC1, VP9, H.264, H/265
Audio Output	1 x Line-out (via JAE connector)
TV Tuner	N/A
RS-232	1 x TX/RX (via JAE connector)
USB 2.0	2 (2 x via JAE connector)
USB 3.0	5 (4 x external, 1 x via JAE connector)
Expansion Slot	1 x M.2 2230
Operating Temperature	0°C to 55°C
Power Type	12-19V DC (via JAE connector)
Dimension (W x D x H, mm)	175 x 100 x 20
OS Support	Win10/Linux

Product Selection Guide

Kiosk Panel PC

Model			
	KPPC 1514B	KPPC 1521A	KPPC 1814B
LCD Size	15.6" 16:9	15.6" 16:9	18.5" 16:9
Max. Resolution	1366 x 768	1366 x 768	1366 x 768
Luminance (cd/m2)	400	400	250
Contrast Ratio	500	500	1000
Viewing Angle (H-V)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED
LCD Color	16.7M	16.7M	16.7M
Touch Screen	15.6" zero bezel projected capacitive touch panel	15.6" zero bezel projected capacitive touch panel	18.5" zero bezel projected capacitive touch panel
CPU	Intel® Core™ i7-6700TE/ i5-6500TE/i3-6100TE/ Pentium® G4400TE/ Celeron® G3900TE, support LGA1151 CPU, TDP 35W	Intel® Celeron® N3060 dual processor, up to 2.48G, 6W, 2M L2 cache	Intel® Core™ i7-6700TE/ i5-6500TE/i3-6100TE/Pentium® G4400TE/ Celeron® G3900TE, support LGA1151 CPU, TDP 35W
Memory	Dual DDR4 2133MHz SO-DIMM, up to 32GB non-ECC, un-buffered (optional)	DDR3L 1333MHz SO-DIMM, up to 8GB (optional)	Dual DDR4 2133MHz SO-DIMM, up to 32GB non-ECC, un-buffered (optional)
Storage Device	1 x 2.5" SATA SSD drive bay (optional)	1 x 2.5" SATA SSD drive bay (optional)	1 x 2.5" SATA SSD drive bay (optional)
2nd Display Output	2 x HDMI (either one)	VGA/DVI-D	2 x HDMI (either one)
Ethernet (10/100/1000)	2	2	2
Line-out/Mic	1/1	1/1	1/1
USB 2.0/3.0	1/4	1/4	1/4
COM Port	1 x RS232 1 x RS232/422/485 selectable	4 x RS232 1 x RS232/422/485 selectable	1 x RS232 1 x RS232/422/485 selectable
DC-IN Jack	DC-12V in	DC-12V in	DC-12V in
Power Switch	1	1	1
Expansion	1 x mini-PCIe (F/S)(mSATA) 1 x mini-PCIe (H/S)(PCIe/USB)	1 x M.2 M-key (2280) 1 x mini-PCIe (F/S)(PCIe/USB)	1 x mini-PCIe (F/S)(mSATA) 1 x mini-PCIe (H/S)(PCIe/USB)
Power Supply Adapter	External AC DC 12V/7A 84W power adapter	External AC DC 12V/5A 60W power adapter	External AC DC 12V/7A 84W power adapter
Operating Temp.	0°C to 50°C	0°C to 50°C	0°C to 45°C
Storage Temp.	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Operating Humidity	10%~90%, non-condensing	10%~90%, non-condensing	10%~90% non-condensing
IP Level	Front bezel IP65	Front bezel IP65	Front bezel IP65
Dimension (W x H x D, mm)	417.80 x 318.80 x 66.25	417.80 x 318.80 x 66.25	417.80 x 318.80 x 66.25
Weight (kg)	7.4	6.2	9.4

			
	KPPC 1821A	KPPC 2114B	KPPC 2121A
LCD Size	18.5" 16:9	21.5" 16:9	21.5" 16:9
Max. Resolution	1366 x 768	FHD,1920 x 1080	FHD,1920 x 1080
Luminance (cd/m2)	250	250	250
Contrast Ratio	1000	3000	3000
Viewing Angle (H-V)	80(U), 80(D), 85(L), 85(R)	89(U), 89(D), 89(L), 89(R)	89(U), 89(D), 89(L), 89(R)
Backlight	LED	LED	LED
LCD Color	16.7M	16.7M	16.7M
Touch Screen	18.5" zero bezel projected capacitive touch panel	21.5" zero bezel projected capacitive touch panel	21.5" zero bezel projected capacitive touch panel
CPU	Intel® Celeron® N3060 dual processor, up to 2.48G, 6W, 2M L2 cache	Intel® Core™ i7-6700TE/i5-6500TE/i3-6100TE/ Pentium® G4400TE/ Celeron® G3900TE, support LGA1151 CPU, TDP 35W	Intel® Celeron® N3060 dual processor, up to 2.48G,6W, 2M L2 cache
Memory	DDR3L 1333MHz SO-DIMM, up to 8GB (optional)	Dual DDR4 2133MHz SO-DIMM, up to 32GB non-ECC, un-buffered (optional)	DDR3L 1333MHz SO-DIMM, up to 8GB (optional)
Storage Device	1 x 2.5" SATA SSD drive bay (optional)	1 x 2.5" SATA SSD drive bay (optional)	1 x 2.5" SATA SSD drive bay (optional)
2nd Display Output	VGA/DVI-D	2 x HDMI (either one)	VGA/DVI-D
Ethernet (10/100/1000)	2	2	2
Line-out/Mic	1/1	1/1	1/1
USB 2.0/3.0	1/4	1/4	1/4
COM Port	4 x RS232 1 x RS232/422/485 selectable	1 x RS232 1 x RS232/422/485 selectable	4 x RS232 1 x RS232/422/485 selectable
DC-IN Jack	DC-12V in	DC-12V in	DC-12V in
Power Switch	1	1	1
Expansion	1 x M.2 M-key (2280) 1 x mini-PCIe (F/S)(PCIe/USB)	1 x mini-PCIe (F/S)(mSATA) 1 x mini-PCIe (H/S)(PCIe/USB)	1 x M.2 M-key (2280) 1 x mini-PCIe (F/S)(PCIe/USB)
Power Supply Adapter	External AC DC 12V/5A 60W power adapter	External AC DC 12V/7A 84W power adapter	External AC DC 12V/5A 60W power adapter
Operating Temp.	0°C to 50°C	0°C to 45°C	0°C to 45°C
Storage Temp.	-20°C to 60°C	-20°C to 60°C	-20°C to 60°C
Operating Humidity	10%~90%, non-condensing	10%~90% non-condensing	10%~90% non-condensing
IP Level	Front bezel IP65	Front bezel IP65	Front bezel IP65
Dimension (W x H x D, mm)	490.80 x 320.60 x 65.15	562.40 x 382.40 x 65.35	562.40 x 382.40 x 65.35
Weight (kg)	8.2	10.4	9.25

Product Selection Guide

Open Frame Panel PC

Model						
	OPPC 1240T	**OPPC 1540T**	**OPPC 1540HT-J1900**	**OPPC 1740T**	**OPPC 1940T**	**OPPC 1940HT-J1900**
LCD Size	12.1" 4:3	15" 4:3	15" 4:3	17" 4:3	19" 4:3	19" 4:3
Max. Resolution	XGA, 1024 x 768	XGA, 1024 x 768	XGA, 1024 x 768	SXGA, 1280 x 1024	SXGA, 1280 x 1024	SXGA, 1280 x 1024
Luminance (cd/m2)	350	420	1000	350	350	1000
Contrast Ratio	800	800	2500	1000	1000	1000
Viewing Angle (H-V)	80(U), 80(D), 80(L), 80(R)	80(U), 80(D), 80(L), 80(R)	88(U), 88(D), 88(L), 88(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)	80(U), 80(D), 85(L), 85(R)
Backlight	LED	LED	LED	LED	LED	LED
LCD Color	16.7M	16.7M	16.2M	16.7M	16.7M	16.7M
Touch Screen	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire	Resistive 5-wire
Touch Light Transmission	80%	80%	80%	80%	80%	80%
CPU	Intel Atom® E3826 dual core 1.46GHz	Intel Atom® E3826 dual core 1.46GHz	Intel® Celeron® J1900 quad core 2.0GHz	Intel Atom®E3826 dual core 1.46GHz	Intel Atom® E3826 Dual Core 1.46GHz	Intel® Celeron® J1900 quad core 2.0GHz
Memory	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module	4GB DDR3L SO-DIMM module
CF or CFast Socket	1 Cfast	1 CFast	1 CFast	1 CFast	1 CFast	1 CFast
2nd Display Output	VGA	VGA	VGA	VGA	VGA	VGA
PS2 KB/MS	1	1	1	1	1	1
Ethernet (10/100/1000)	2	2	2	2	2	2
Line-out	Line-out	Line-out	Line-out	Line-out	Line-out	Line-out
USB2.0/3.0	2/1	2/1	2/1	2/1	2/1	2/1
COM Port	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485	2 x RS232/422/485
Power Switch	1	1	1	1	1	1
Reset Button	1	1	1	1	1	1
Power Jack	3-pin phoneix connector	3-pin phoneix connector	3-pin phoneix connector	3-pin phoneix connector	3-pin phoneix connector	3-pin phoneix connector
2.5" Hard Driver Bay	Yes	Yes	Yes	Yes	Yes	Yes
Expansion	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe	2 x mini-PCIe
Mounting	Panel/wall/stand/ VESA 75 x 75, 100 x 100mm	Panel/wall/stand/ VESA 75 x 75, 100 x 100mm	Panel/wall/stand/ VESA 75 x 75, 100 x 100mm	Panel/wall/stand/ VESA 75 x 75, 100 x 100mm	Panel/wall/stand/ VESA 75 x 75, 100 x 100mm	Panel/wall/stand/ VESA 75 x 75, 100 x 100mm
Power Input	+12 to 30VDC	+12 to 30VDC	+12 to 30VDC	+12 to 30VDC	+12 to 30VDC	+12 to 30VDC
Power Supply Adapter	Optional	Optional	Optional	Optional	Optional	Optional
Operating Temp.	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C
Storage Temp.	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C	-20˚C to 75˚C
Operating Humidity	10% ~ 90%, non-condensing	10% ~ 90%, non-condensing	10% ~ 90%, non-condensing	10% ~ 90%, non-condensing	10% ~ 90%, non-condensing	10% ~ 90%, non-condensing
Dimension (WxHxD, mm)	307 x 240 x 61.8	329 x 280 x 69.3	329 x 280 x 69.3	387 x 323.2 x 73.6	422.6 x 350.6 x 75.8	422.6 x 350.6 x 75.8
Weight (kg)	3.8	4	4	5.6	6.15	6.15

New Product Highlights

2019 New Products

NIFE 104

Intel Atom® E3826 Dual Core, Palm-sized Fanless System

- Onboard Intel Atom® processor E3826 dual core 1.46GHz
- Onboard 2G DDR3L memory, 16G eMMC as the storage
- 2 x Intel® I211 GbE LAN ports, 1 x USB 3.0 and 1 x USB 2.0, 1 x RS232/485
- 1 x Full size & 1 x half size mini-PCIe socket for optional modules
- Targeting at IoT Gateway and Controller markets

NIFE 104M

Intel® Celeron® J1900, Quad Core, Palm-sized Fanless System

- Onboard Intel® Celeron® processor J1900, Quad Core 2GHz
- Onboard 4G DDR3L memory
- 2 x Intel® I211 GbE LAN ports, 1 x USB 3.0 and 1 x USB 2.0, 1 x RS232/485
- 1 x mSATA socket & 1 x half size mini-PCIe socket for optional modules
- Targeting at IoT Gateway and Controller markets

NIFE 105

Intel Atom® x5-E3930 Dual Core , Palm-Sized Fanless System

- Onboard Atom® x5-E3930 processor Dual Core 1.8GHz
- Onboard 4G DDR3L memory, 16G eMMC for OS storage,
- SD socket for data
- 2 x Intel® I210-IT GbE LAN ports, 4 x USB 3.0, 2 x S232/422/485
- 2 x Full size mini-PCIe socket for optional modules
- Targeting at IoT Gateway and Controller markets

NIFE 200S

Intel® Celeron® J1900, Quad Core, Slim Fanless System

- Onboard Intel® Celeron® processor J1900, Quad Core 2GHz
- Support 2 x DDR3L SO-DIMM socket, 8GB RAM max.
- 2 x Intel® I210-AT GbE LAN ports, 4 x USB, 2 x RS232/422/485
- 2 x mini-PCIe socket, 2 x PCI or PCIe expansion
- Targeting at Factory & Machine Automation Controller

NISE 51

Intel® Celeron® N3350 Dual Core Fanless System

- Onboard Intel® Celeron® N3350 Dual Core processor, 2.4 GHz
- 1 x DisplayPorts
- 2 x Intel® I211 GbE LAN ports & 2 x USB 3.0, 2 x USB 2.0
- 1 x M.2 B key for storage/LTE, 1 x M.2 A key for Wi-Fi/Bluetooth
- 1 x mini-PCIe Wi-Fi/LTE wireless module
- 1 x DB9 for RS232/422/485, 2 DB9 for RS232

NISE 105U

Intel® Celeron® J1900 Quad Core Fanless System

- Onboard Intel® Celeron® processor J1900 quad core, 2.42GHz
- 2 x Display output: DVI-I and HDMI
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 2.0, 1 x USB 3.0, 2 x DB9 for RS232/422/485, 2 x DB9 for RS232
- Support 1x mini-PCIe Wi-Fi/LTE wireless module
- Support both 2.5" HDD and M.2

NISE 107

Intel Atom® x5-E3930 Dual Core Fanless System

- Onboard Intel Atom® x5-E3930 dual core processor, 1.30 GHz
- 2 x Display output: 1 x DVI-D + 1 x DP
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0 and 1 x SIM card holder, 2 x DB9 forRS232/422/485
- Support 1x mini-PCIe Wi-Fi/LTE wireless module
- Support both 2.5" HDD and M.2 (external)

NISE 107-POE

Intel Atom® x5-E3940 Quad Core Fanless System

- Onboard Intel Atom® x5-E3940 quad core processor, 1.60 GHz
- 2 x Display output: 1 x DVI-D + 1 x DP
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE, LAN1 support POE function
- 4 x USB 3.0, 1 x SIM card holder, 2 x DB9 for RS232/422/485, 2 x DB9 for RS232
- Support 1x mini-PCIe Wi-Fi/LTE wireless module
- Support both 2.5" HDD and M.2 (external)

NISE 3900E

8th Generation Intel® Core™ i7/i5/i3 Fanless System with one PCIex4 Expansion

- Support 8th generation Intel® Core™ i7/i5/i3 LGA socket type processor with Q170 PCH
- 1 x DP, 1 x DVI-D and 1 x HDMI port with independent display support
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/Fieldbus
- 4 x USB 3.0, 2 x USB 2.0, 1 x external M.2 socket and 1 x SIM card socket

NISE 4200

6th Generation Intel® Core™ i7/i5/i3 Fanless System

- Support 6th gen. Intel® Core™ i7/i5/i3 LGA socket type processor with QM170/HM170 PCH
- 2 x DP, 1 x DVI-D port with independent display support
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/ mSATA/fieldbus
- 4 x USB 3.0, 2 x USB 2.0, 1 x internal M.2 socket and 1 x SIM card socket
- Two Intel® GbE LAN ports and 6 x COM
- 2x (RS232/422/485 with auto flow control) + 4x RS232

APPC 3154

15” TFT XGA 4:3 Flush Panel PC with Intel® Celeron® J1900

- Intel® Celeron® quad core processor J1900, up to 2.0GHz
- 5-wire resistive-touch screen with zero bezel flush front design
- 4GB DDR3L/2.5” HDD bracket
- 3 x USB, 2 x mini-PCIe sockets, 2 x RS232/422/485
- Wide range power input 12~30VDC
- IP65 compliant front panel

APPC 5164P/APPC 5214P

15.6” TFT HD 16:9/21.5” TFT Full HD 16:9 Flush Panel PC with Intel® Celeron® J1900

- Intel® Celeron® quad core processor J1900, up to 2.0GHz
- 10 points P-Cap multi-touch with zero bezel flush front design
- 4GB DDR3L/2.5” HDD bracket
- 3 x USB, 2 x mini-PCIe sockets, 2 x RS232/422/485
- Wide range power input 12~30VDC
- IP65 compliant front panel

KPPC 1514B/1814B

Intelligent Platform Panel PC by Intel® 6th Core™ i-S series 35W Processor

- 15.6”/18.5” multi touch panel PC (1366 x 768)
- Support Intel® Skylake Core™ i 35W, LGA1511 socket, H110, TDP: 35W
- Support two DDR4 SO-DIMM socket, 16GB
- Support multiple display from two HDMI
- I/O incl. 2 x GbE LAN, 2 x COM, 4 x USB 3.0 & 1 x USB 2.0
- Expansion: mSATA, half size mini-PCIe
- DC input +12V

KPPC 2114B

Intelligent Platform Panel PC by Intel® 6th Core™ i-S series 35W Processor

- 21.5” multi touch panel PC (FHD 1920 x 1080)
- Support Intel® Skylake Core™ i 35W, LGA1511 socket, H110, TDP: 35W
- Support two DDR4 SO-DIMM socket, 16GB
- Support multiple display from two HDMI
- I/O incl. 2 x GbE LAN, 2 x COM, 4 x USB 3.0 & 1 x USB 2.0
- Expansion: mSATA, half size mini-PCIe
- DC input +12V

Nue-X100

Fanless Embedded Computer Powered by Intel® Apollo Lake N3350/N4200 Processor

- Intel® Apollo Lake N3350/N4200 processor
- 3.5” MB size as slim chassis design
- Support HDMI 2.0 output
- Fanless design
- mini-PCIe slot support Wi-Fi and LTE module

NDiS B327

Fanless Embedded Computer Powered by Intel® Celeron® N3060 SoC Processo

- HDMI and VGA independent displays output
- 6 x USB, 1 x Gigabit LAN, 1 x RS232
- 1 x mini-PCie slot support Wi-Fi module
- Extension M.2 slot storage
- Compact and slim design

NDiS B328-KI3

Fanless Embedded Computer Powered by Intel® Core™ i3-7100U SoC Processor

- 2 x HDMI 4K resolution
- 6 x USB, 1 x Gigabit LAN, 1 x RS232
- 1 x M.2 slot support Wi-Fi module
- 2 x DDR4 SO-DIMM sockets (up to 32G)
- Extension M.2 slot storage
- Compact and fanless design

NDiS B336R

Fanless Embedded Computer Powered by Quad Core Intel Atom® x7-E3950 Processor, 2.0GHz

- 6th generation Intel Atom® x7-E3950 processor
- Tripe video output (HDMI/DP support 4K2K resolution)
- Compact and slim design (H: 21.5mm)
- Wide temperature support
- Supports W-Fi, GPS, and 3G module
- Fanless design

NDiS B866

Multi-Display Embedded Computer Powered by 6th Generation Intel® Core™ Processor with Discrete AMD Radeon™ E8870 GPU

- 6th generation Intel® Core™ processor
- AMD Radeon™ E8870 EMBEDDED GPU
- 6 HDMI output (4K2K resolution support)
- Compact 1U chassis design
- Removable dual HDD tray supporting RAID 0, 1

NDiS S538

Embedded Computer Powered by 6th Gen. Intel® Core™ SDM-L Based All-In-One Signage Applications

- Intel® Smart Display Module Large (Intel® SDM-L) design in
- 6th generation Intel® Core™ Skylake processor
- Intel® integrated HD 530 graphic engine
- Support 3 independent 4K2K video out
- Dual DDR4 SO-DIMM support
- Support Wi-Fi module

NIFE 101

Intel® Atom™ E3826 Dual Core Factory Automation Fanless System

Main Features

- Onboard Intel® Atom™ processor E3826 Dual Core 1.46GHz
- 1 x DVI display output or 1x VGA converted from DVI-I
- 2 x Intel® I210-IT GbE LAN ports support WoL, teaming and PXE
- 1 x USB 2.0 & 1 x USB 3.0
- 2 x RS232/422/485 with 2.5KV isolation protection
- 1 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE
- Front access CFast socket and RTC battery
- Support -20~70 °C extended operating temperature
- Typical 24V DC input with ±20% range

Product Overview

Powered by the latest generation of Intel® Atom™ processor E3826 (formerly codenamed "Bay Trail-I"), NIFE101 presents intelligent PC-based controller and Modbus RTU/TCP gateway for factory automation. NIFE101 support ACP ThinManager that offers management solutions for the modern factory by simplifying management and also support Indusoft for HMI and SCADA. Up to 4G DDR3L memory, NIFE101 have several options on storage devices like CFast and SSD. The NIFE 101 support extended operating temperature from -20 upto 70 degree C with typical DC input 24V ±20% range. The NIFE 101 has high integration ability with optional mini-PCIe module and 2 x COM ports with Isolation 2.5kv protect, which makes it a reliable connection with devices in IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module). NIFE 101 is definitely the top choice for IOT/M2M intelligent system.

Specifications

CPU Support

- Onboard Intel® Atom™ processor E3826 Dual Core 1.46GHz
- Support Intel® Atom™ E3800 processor family from single core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 4GB RAM max., un-buffered and non-ECC

Display Option

- 1 x DVI display output
- 1 x VGA display output (converted from DVI-I to VGA adapter)

I/O Interface-Front

- ATX power on/off switch
- LEDs for power status, HDD access, battery Low, 2 x programing LEDs, 4x Tx/Rx LEDs
- 1 x External CFast socket
- 1 x SIM card holder
- 2 x Intel® I210-IT GbE LAN ports, support WoL, teaming and PXE
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 1 x USB 2.0 (500mA per each)
- 2 x RS232/422/485 with 2.5KV isolation protection, support auto flow control
  - Jumper-free setting on RS232/422/485
  - Support RI function on COM2
- 1 x 2-pin remote power on/off switch
- 1 x 3-pic DC input, Typical 24V DC input with ±20% range

Storage Device

- 1 x CFast (SATA 2.0)
- 1 x 2.5" SSD (SATA 2.0)

Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE

Power Requirement

- Typical 24V DC input with ±20% range
- 1 x optional 24V, 60W power adapter

Dimensions

- 58mm (W) x 135.5mm (D) x 192.5mm (H)

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 70°C with industrial grade device (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - SSD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ CFast & SSD condition:
  - Random: 2Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

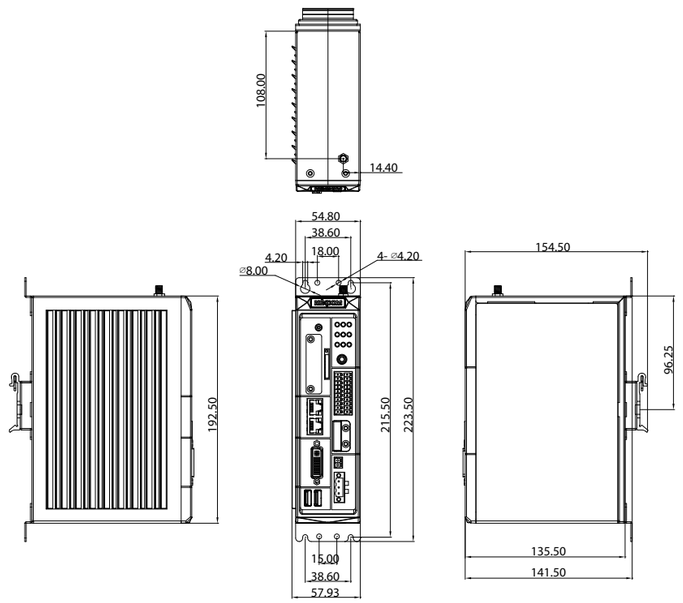
Certifications

- CE
- FCC Class A

Support OS

- Windows 10 IoT Enterprise, 64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0
- Wind River® intelligent device platfrom XT 2.0

Dimension Drawing



Ordering Information

- **NIFE 101 (P/N: 10J70010100X0)**
  Intel® Atom™ processor E3826 Dual Core fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NIFE 103

Intel® Atom™ E3826 Dual Core Factory Automation Fanless System
with Palm Size form Factor

Top View

Bottom View

Main Features

- Onboard Intel® Atom™ processor E3826 Dual Core 1.46GHz
- 1 x Micro HDMI DisplayPort (type D)
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 1 x USB 3.0 and 1x USB 2.0
- 1 x Full size mini-PCIe socket for optional mSATA/4G/3.5G/LTE modules
- 1 x Half size mini-PCIe socket for optional Wi-Fi module
- 1 x RS232/485 with auto flow control
- Support -5~55 °C operating temperature
- Support +24VDC input ±20%

Product Overview

NEXCOM's NIFE product line comes in a range of form factors and processor configurations including Intel® Atom™ and Intel® Core™ processors to suit different application requirements. For NIFE 103, it positions itself at the entry level of fieldbus controller, and suitable for M2M communication gateway and data server applications. Boosted by Intel® BayTrail-I E3826 Processor and the palm size form-factor, NIFE1 03 is suitable entry level automation system which satisfying the needs of steady system performance and installation in gateway field or a small controller cabinet.

NIFE 103 meets PLCopen® specifications and allows softlogic control programming. Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC controller and M2M gateway.

Specifications

CPU Support
- Onboard Intel® Atom™ processor E3826 Dual Core 1.46GHz

Main Memory
- On-board type 2GB DDR3L RAM
  - Un-buffered and non-ECC

Display Option
- 1 x Micro HDMI DisplayPort (Type D)

I/O Interface-Front
- LEDs for power LED, battery low LED, WWAN LED, WLAN LED, 1 x programmable GPO LED
- 1 x RS232/485 support auto flow control
  - RS232 (Tx/Rx/CTS/RTS only)
  - RS485 support auto flow control
  - Support 2.5KV isolation protection
- 2 x Intel® I210-IT GbE LAN ports, support WoL, teaming and PXE
- 1 x USB 3.0 (900mA per each)
- 1 x USB 2.0 (500mA per each)

I/O Interface-Top
- 1 x Micro HDMI DisplayPort (type D)
- 1 x System reset button

I/O Interface-Bottom
- 1 x 4-in/4-out 5V GPIO via 10-pin terminal block

Storage Device
- Onboard 16GB eMMC
- Optional mSATA module

Expansion Options
- 1 x Full size mini-PCIe socket for optional mSATA/4G/3.5G/LTE modules (USB signal only)
- 1 x Half size mini-PCIe socket for optional Wi-Fi module (PCIe and USB signal)

Power Requirement
- Power input: typical +24VDC ±20%
- 1 x Optional 24V, 60W power adapter

Dimensions
- 56.5mm (W) x 100mm (D) x 120mm (H)

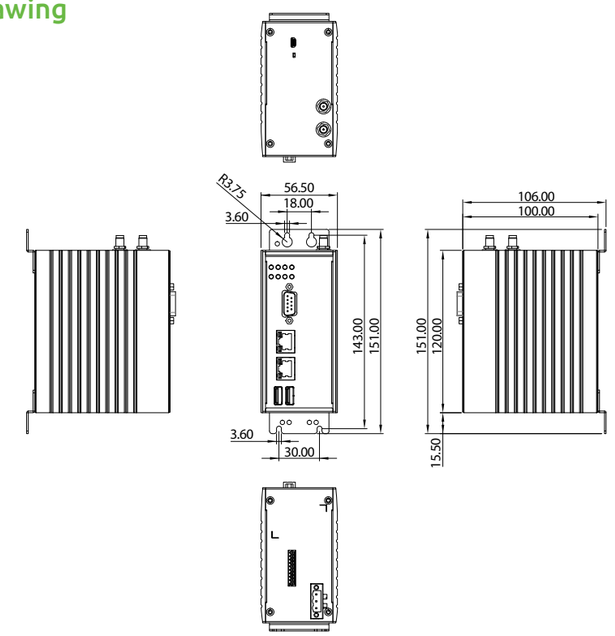
Construction
- Aluminum and Metal Chassis with front access design

Environment
- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - mSATA/eMMC: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ mSATA or eMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE Approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A

Support OS
- Windows 10 IoT Enterprise, 64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Dimension Drawing

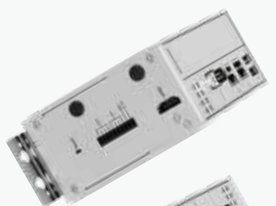


Ordering Information

- **NIFE 103 system (P/N: 10J70010300X0)**
  Intel® Atom™ processor E3826 Dual Core fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NIFE 104

Intel Atom® (E3826)/Intel® Celeron® (J1900)
Factory Automation Fanless System in Palm Size



Top View

Bottom View

Main Features

- Palm size form factor design
- Onboard Intel Atom® E3826 processor with 2GB DDR3L RAM
- Onboard Intel® Celeron® J1900 processor with 4GB DDR3L RAM
- 2 x Intel® I211 GbE LAN ports; support WoL and PXE
- 1 x RS232/485 with auto flow control
- Support +24VDC input ±20%
- TPM 2.0 onboard

Product Overview

NEXCOM's NIFE product line comes in a range of form factors and processor configurations including Intel Atom® and Intel® Celeron® processors to suit for different factory automation applications use. For NIFE 104, it positions itself at the entry level of fieldbus controller, and suitable for M2M communication gateway and data server applications. Boosted by Intel® BayTrail E3826/J1900 processor and the palm size form-factor, NIFE 104 is an ideal product for automation controller or smart gateway.

Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC controller and M2M gateway.

Specifications

CPU Support

- NIFE 104: onboard Intel Atom® processor E3826, Dual Core 1.46GHz
- NIFE 104M: onboard Intel Celeron® processor J1900, Quad Core 2GHz

Main Memory

- NIFE 104: onboard type 2GB DDR3L RAM (E3826), un-buffered and non-ECC
- NIFE 104M: onboard type 4GB DDR3L RAM (J1900), un-buffered and non-ECC

Display Option

- HDMI

I/O Interface-Front

- LED for power, battery, TX, RX, WWAN, WLAN, GPO1, GPO2
- 1 x RS-232/485 with auto flow control (support 2.5KV isolation protection)
- 2 x Intel® I211 GbE LAN controller (both jumbo frame: 9KB)
- 1 x USB 3.0 ports (900mA per each)
- 1 x USB 2.0 ports (500mA per each)

I/O Interface-Top

- 1 x HDMI port
- 1 x System reset button
- 1 x 4-in/4-out 5V GPIO via 10-pin terminal block (5V/TTL type)

Storage Device

- NIFE 104: onboard 16GB eMMC
- NIFE 104M: optional mSATA module (no eMMC onboard)

Expansion Options

- 1 x Full size mini-PCIe socket
  - NIFE 104: USB & PCIe signal
  - NIFE 104M: USB & mSATA signal
- 1 x Half size mini-PCIe socket for optional Wi-Fi/4G/3.5G/LTE modules (USB signal & PCIe signal)

Power Requirement

- Power input: typical +24VDC ±20%
- 1 x Optional 24V, 60W power adapter

Dimensions

- 56.5mm (W) x 100mm (D) x 130mm (H)

Construction

- Aluminum and metal chassis with front access design

Environment

- Operating temperature:
  Ambient with air flow: -5~55°C for NIFE 104
  Ambient with air flow: -5~50°C for NIFE 104M
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C~80°C
- Relative humidity: 10%~93% (non-condensing)
- Shock protection:
  - mSATA/eMMC: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ mSATA or eMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

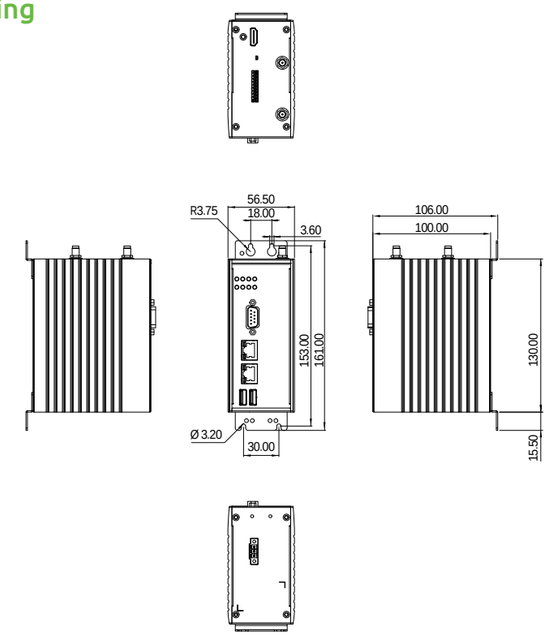
Certifications

- CE Approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A

Support OS

- Windows 10 IoT Enterprise, 64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0
- Ubuntu 14.04

Dimension Drawing



Ordering Information

- **NIFE 104 (P/N: 10J70010400X0)**
  Intel Atom® E3826 (Bay Trail) Factory Automation Fanless System in palm size with 2G memory and 16G eMMC onboard
- **NIFE 104M (P/N: 10J70010401X0)**
  Intel® Celeron® J1900 (Bay Trail) Factory Automation Fanless System in palm size with 4G memory onboard (no eMMC)
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7440060001X00)**

NIFE 105

Intel® Atom® x5-E3930 Dual Core Factory Automation Fanless System with Palm Size form Factor

Main Features

- Onboard Intel Atom® x5-E3930 processor Dual Core 1.8GHz
- 1 x HDMI display
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0
- 2 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 2 x RS232/422/485 with auto flow control
- 1 x External SD card slot and 1 x SIM card socket
- Support -5~55 degree C operating temperature
- Support typical +24VDC ±20%

Product Overview

NEXCOM's NIFE product line comes in a range of form factors and processor configurations including Intel Atom® and Intel® Core™ processors to suit different application requirements. For NIFE 105, it positions itself at the entry level of fieldbus controller, and suitable for M2M communication gateway and data server applications. Boosted by Intel latest Atom® x5-E3930 Processor and the palm size form-factor, NIFE 105 is the most suitable entry level automation system which satisfying the needs of steady system performance and installation in gateway field or a small controller cabinet.

NIFE 105 meets PLCopen® specifications and allows easy control programming via Softlogic Tool Kit. Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC controller and M2M gateway.

Specifications

CPU Support
- Onboard Intel® Atom™ x5-E3930 processor Dual Core 1.8GHz

Main Memory
- On-board type 4GB DDR3L RAM
  - Un-buffered and non-ECC

Display Output
- 1 x HDMI display

I/O Interface-Front
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0 (900mA)
- 1 x External SD card slot (data storage only)
- 1 x Power/1x HDD access LEDs
- 1 x Battery low/1x GP0 programming LED
- 2 x Tx/Rx LEDs
- 1 x ATX power on/off switch

I/O Interface-Top
- 1 x Remote switch
- 1 x SIM card slot
- 1 x RTC battery socket

I/O Interface-Bottom
- 2 x DB9, support RS232/422/485 with Auto Flow Control
- 1 x Optional DB9, support 4 x GPI and 4 x GPO

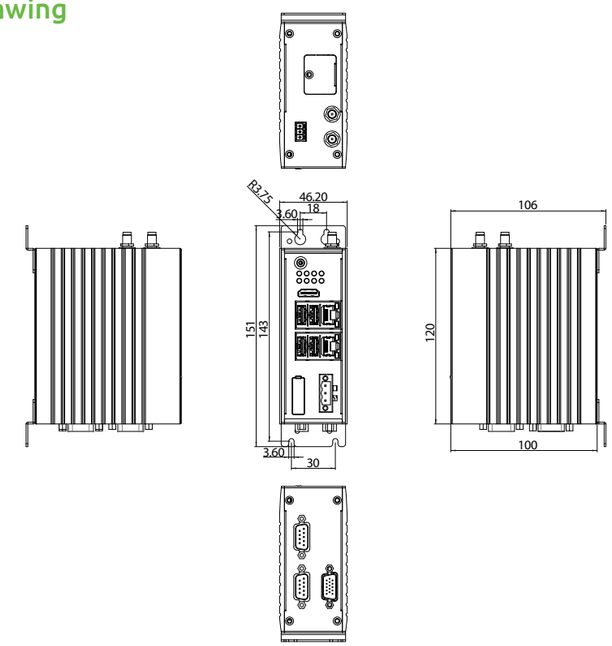
Internal I/O Interface
- 1 x USB2.0, 500mA max.
- 1 x COM3, pin header, RS232 with Tx/Rx/RTS/CTS signal only
- 1 x COM4, pin header, RS232 with Tx/Rx/RTS/CTS signal only
- 4 x GPI and 4 x GPO (General purpose I/O), TTL 5V

Storage Device
- Onboard 16GB eMMC
- Optional mSATA module

Expansion
- 1 x Full size mini-PCIe socket (USB+PCIe signal) for optional Wi-Fi/LTE/mSATA module
- 1 x Full size mini-PCIe socket (USB+PCIe signal) for optional modules

Power Requirement
- Power input: typical +24VDC ±20%
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Dimensions
- 46.2mm (W) x 100mm (D) x 120mm (H)

Construction
- Aluminum and metal chassis with front access design

Environment
- Operating temperature:
  Ambient with air flow: -5~55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20~75°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - mSATA/eMMC: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ mSATA or eMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A

Support OS
- Windows* 10 Enterprise (64-bit)

Ordering Information

- **NIFE 105 system (P/N: 10J70010500X0)**
  Intel Atom® x5-E3930 Dual Core Factory Automation Fanless System with 4G memory and 16G eMMC onboard
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NIFE 105W

Dual Core Intel Atom® x5-E3930 Processor Automation System

Top View

Bottom View

Main Features

- Onboard Intel Atom® x5-E3930 processor Dual Core 1.8GHz
- 1 x HDMI display
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0
- 2 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 2 x RS232/422/485 with auto flow control
- 1 x External SD card slot and 1 x SIM card socket
- Support -5°C~55 °C operating temperature
- Support +24VDC input

Product Overview

NEXCOM's NIFE product line comes in a range of form factors and processor configurations including Intel Atom® and Intel® Core™ processors to suit different application requirements. For NIFE 105, it positions itself at the entry level of fieldbus controller, and suitable for M2M communication gateway and data server applications. Boosted by Intel® latest Apollo Lake-I processors and the palm size form-factor, NIFE 105 is the most suitable entry level automation system which satisfying the needs of steady system performance and installation in gateway field or a small controller cabinet.

NIFE 105 meets PLCopen® specifications and allows easy control programming via Softlogic tool kit. Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC controller and M2M gateway.

Specifications

CPU Support

- Onboard Intel Atom® x5-E3930 processor Dual Core 1.8GHz

Main Memory

- Onboard type 4GB DDR3L RAM
  - Un-buffered and non-ECC

Display Output

- 1 x HDMI display

I/O Interface-Front

- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0 (900mA)
- 1 x External SD card slot (data storage only)
- 1 x FBI expansion slot
- 1 x Power/1 x HDD access LEDs
- 1 x Battery low/1 x GP0 programming LED
- 2 x Tx/Rx LEDs
- 1 x ATX power on/off switch

I/O Interface-Top

- 1 x Remote switch
- 1 x SIM card slot
- 1 x RTC battery socket

I/O Interface-Bottom

- 2 x DB9, support RS232/422/485 with Auto Flow Control
- 1 x Optional DB9, support 4 x GPI and 4 x GPO

Internal I/O Interface

- 1 x USB2.0, 500mA max.
- 1 x COM3, pin header, RS232 with Tx/Rx/RTS/CTS signal only
- 1 x COM4, pin header, RS232 with Tx/Rx/RTS/CTS signal only
- 4 x GPI and 4 x GPO (General purpose I/O), TTL 5V

Storage Device

- Onboard 16GB eMMC
- Optional mSATA module

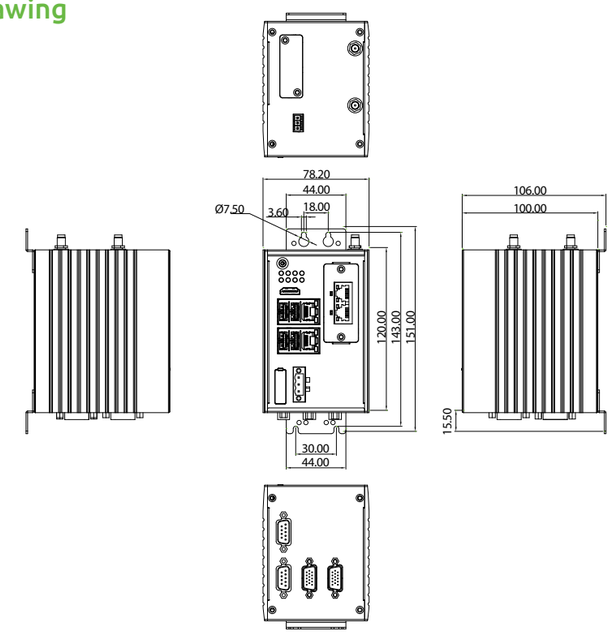
Expansion

- 1 x Full size mini-PCIe socket (USB+PCIe signal) for optional Wi-Fi/LTE/ mSATA module
- 1 x Full size mini-PCIe socket (USB+PCIe signal) for optional modules

Power Requirement

- Power input: typical +24VDC ±20%
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Dimensions

- 78.2mm (W) x 100mm (D) x 120mm (H)

Construction

- Aluminum and metal chassis with front access design

Environment

- Operating temperature:
  Ambient with air flow: -5~55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20~75°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - mSATA/eMMC: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ mSATA or eMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A

Support OS

- Microsoft Windows 10 Enterprise 64-bit

Ordering Information

- **NIFE 105W system (P/N: 10J70010501X0)**
  Intel Atom® x5-E3930 Dual Core Factory Automation Fanless System with 4G memory, 16G eMMC onboard and one FBI opening
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NIFE 200

Intel® Celeron® J1900 Quad Core 2.0GHz Factory Automation Fanless System with Fieldbus Expansion Ability

Microsoft Azure Certified

Main Features

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Dual independent display from DP and DVI-I
- 2 x Intel® I210-AT GbE LAN ports support WoL, teaming and PXE
- 3 x USB 2.0 & 1 x USB 3.0
- 2 x RS232/422/485
- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/fieldbus modules
- Top access SD card socket
- Support -5~55 degree C operating temperature
- Typical 24V DC input with ±20% range, with reverse polarity protection

Product Overview

Powered by the latest generation of Intel® Celeron® processor J1900 (formerly codenamed "Bay Trail-D"), NIFE 200 presents intelligent PC-based controller and IoT gateway for factory automation. NIFE 200 supports up to 8G DDR3L memory and have several options on storage devices like SD, mSATA, HDD and SSD. The NIFE 200 support operating temperature from -5 up to 55 degree C with typical DC input 24V ±20% range. The NIFE 200 has high integration ability with optional mini-PCIe module and 2 x COM ports, which makes it a reliable connection with devices in factory automation applications (with optional PROFIBUS, PROFINET, DeviceNET, EtherCAT, EtherNet/IP, CANopen, SERCOSIII master module), IoT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NIFE 200 is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support
- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory
- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option
- Dual independent display
  - DVI-I and DP

I/O Interface-Front
- ATX power on/off switch
- LEDs for HDD LED, batty LEDs, power LED, COM port Tx/Rx, 5x programmable GPO LEDs
- 1 x External SD card
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports, support WoL, teaming and PXE
- 1 x DP display output
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 3 x USB 2.0 (500mA per each)
- 2 x RS232/422/485 support auto flow control
  - Jumper-free setting on RS232/422/485
  - Support 2.5KV isolation protection on COM1
- 1 x 3-pin DC input, typical 24V DC input with ±20% range

Storage Device
- 1 x 2.5" SSD/HDD (SATA 2.0) - front accessible
- 1 x SD card (data storage only)
- 1 x mSATA

Expansion Slot
- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/fieldbus modules

Power Requirement
- Typical 24V DC input with ±20% range, with reverse polarity protection
- 1 x Optional 24V, 60W power adapter

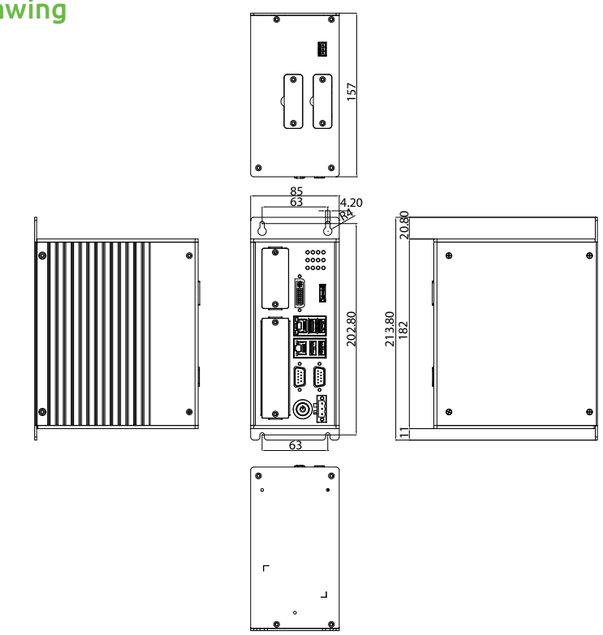
Dimensions
- 85mm (W) x 157mm (D) x 214mm (H)

Construction
- Aluminum and metal chassis with fanless design

Environment
- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - SSD: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ SSD condition:
  - Random: 2Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-64

Certifications
- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A
- LVD
- UL60950

Dimension Drawing



Support OS
- Windows 10 IoT Enterprise, 64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Ordering Information

- **NIFE 200 (P/N: 10J70020000X0)**
  Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NIFE 200S

Intel® Celeron® J1900 Quad Core 2.0GHz Fanless System

Main Features

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Dual independent display output
- 2 x Intel® I210-AT GbE LAN ports support WoL, teaming and PXE
- 3 x USB 2.0 & 1 x USB 3.0
- 2 x RS232/422/485 with 2.5KV isolation protection
- 2 x mini-PCIe socket for optional wireless modules
- Support -5~55 degree C operating temperature
- Typical 24V DC input

Product Overview

Powered by the latest generation of Intel® Celeron® processor J1900 (formerly codenamed "Bay Trail-D"), NIFE 200S presents intelligent PC-based controller and IoT gateway for factory automation. NIFE 200S supports up to 8G DDR3L memory and support flash type of storage devices like SD (data storage use) and mSATA for better vibration resistance. The NIFE 200S support operating temperature from -5 up to 55°C with typical DC input 24V ±20% range. The NIFE 200S has high integration ability with optional mini-PCIe module and 2 x COM ports, which makes it a reliable connection with devices in factory automation applications, IoT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NIFE 200S is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - DVI-I
  - DP

I/O Interface-Front

- ATX power on/off switch
- LEDs for HDD LED, batty LEDs, power LED, COM port Tx/Rx, 5 x programmable GPO LEDs
- 2 x Intel® I210-AT GbE LAN ports, support WoL, teaming and PXE
- 1 x DP display output
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 3 x USB 2.0 (500mA per each)
- 2 x RS232/422/485 support auto flow control
  - Jumper-free setting on RS232/422/485
  - Support 2.5KV isolation protection on COM1
- 1 x 3-pin DC input, typical 24V DC input with ±20% range

Storage Device

- 1 x internal SD card (data storage only)
- 1 x miniPCIe for mSATA use

Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/mSATA modules
- 1 x SIM card holder for wireless use

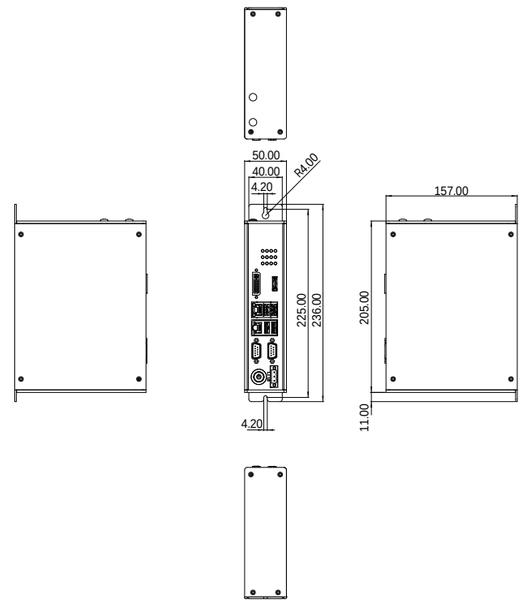
Power Requirement

- Typical 24V DC input with ±20% range, with reverse polarity protection
- 1 x Optional 24V, 60W power adapter

Dimensions

- 50mm (W) x 157mm (D) x 205mm (H)

Dimension Drawing



Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ SSD condition:
  - Random: 2Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-64

Support OS

- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0
- Windows 10 IoT Enterprise, 64-bit

Certifications

- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A
- LVD

Ordering Information

- **NIFE200S (P/N: 10J70020004X0)**
  Intel® Celeron® J1900 Quad Core 2.0GHz Slim Fanless System

NIFE 200P2/E2/P2E

Intel® Celeron® J1900 Quad Core 2.0GHz Factory Automation Fanless System with Fieldbus Expansion Ability

Main Features

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Dual independent display from DP and DVI-I
- 2 x Intel® I210-AT GbE LAN ports support WoL, teaming and PXE
- 3 x USB 2.0 & 1 x USB 3.0
- 2 x RS232/422/485
- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/fieldbus modules
- Top access SD card socket
- Support -5~55 degree C operating temperature
- Typical 24V DC input with ±20% range, with reverse polarity protection

Product Overview

Powered by the latest generation of Intel® Celeron® processor J1900 (formerly codenamed “Bay Trail-D”), NIFE 200P2 presents intelligent PC-based controller and IoT gateway for factory automation. NIFE 200P2/P2E supports up to 8G DDR3L memory and have several options on storage devices like SD, mSATA, HDD and SSD. The NIFE 200P2/P2E support operating temperature from -5 up to 55 degree C with typical DC input 24V ±20% range. The NIFE 200P2/P2E has high integration ability with optional mini-PCIe module and 2 x COM ports, which makes it a reliable connection with devices in factory automation applications (with optional PROFIBUS, PROFINET, DeviceNET, EtherCAT, EtherNet/IP, CANopen, SERCOSIII master module), IoT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NIFE 200P2 is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support

- Onboard Intel® Celeron® processor J1900 Quad Core 2.0GHz
- Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - DVI-I and DP

I/O Interface-Front

- ATX power on/off switch
- LEDs for HDD LED, batty LEDs, power LED, COM port Tx/Rx, 5x programmable GPO LEDs
- 1 x External SD Card
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports, support WoL, Teaming and PXE
- 1 x DP display output
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 3 x USB 2.0 (500mA per each)
- 2 x RS232/422/485 support auto flow control
  - Jumper-free setting on RS232/422/485
  - Support 2.5KV isolation protection on COM1
- 1 x 3-pin DC input, typical 24V DC input with ±20% range

Storage Device

- 1 x 2.5" SSD/HDD (SATA 2.0) --front accessible
- 1 x SD card (data storage only)
- 1 x mSATA

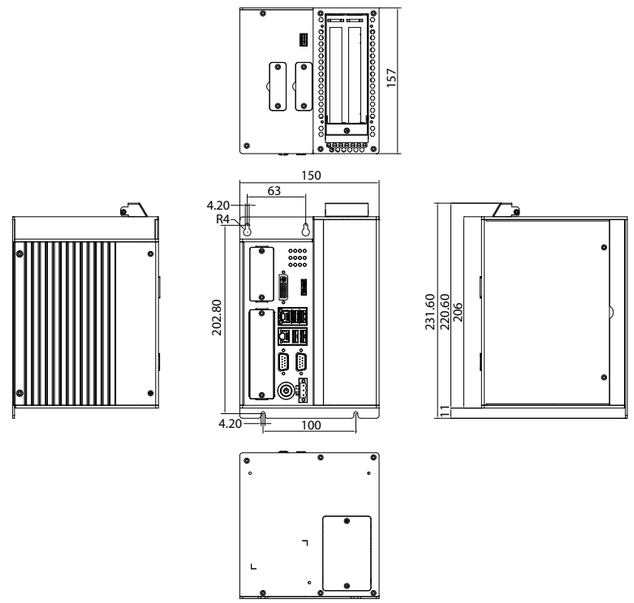
Expansion Slot

- NIFE 200P2: two PCI expansion
  - Add-on card length: 176mm max.
  - Power consumption: 10W/slot max.
- NIFE 200P2E: one PCI and one PCIe x4 expansion
  - Add-on card length: 176mm max.
  - Power consumption: 10W/slot max.
- NIFE 200E2: two PCIe x1 expansion
  - Add-on card length: 176mm max.
  - Power consumption: 10W/slot max.
- 2 x mini-PCIe socket for optional Wi-Fi/3.5G/4G LTE/fieldbus modules

Power Requirement

- Typical 24V DC input with ±20% range, with reverse polarity protection
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Dimensions

- 151mm (W) x 157mm (D) x 230mm (H)

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - SSD: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ SSD condition:
  - Random: 2Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-64

Certifications

- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A
- LVD
- UL60950

Support OS

- Windows 10 IoT Enterprise, 64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Ordering Information

- **NIFE 200P2 (P/N: 10J70020001X0)**
  Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- **NIFE 200P2E (P/N: 10J70020002X0)**
  Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- **NIFE 200E2 (P/N: 10J70020019X0)**
  Intel® Atom™ processor J1900 Quad Core 2.0GHz fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NIFE 300

6th Generation Intel® Core™ i7/i5/i3 LGA Automation System

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Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 LGA1151 socket type processors
- Intel® Q170 PCH
- 1 x DVI-D, and 1x HDMI for dual independent display support
- 3 x Intel® GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0, 2 x USB 2.0 and 2 x RS232/422/485 auto
- 1 x front access 2.5"SATA HDD tray
- 2 x mini-PCIe socket support optional modules and mSATA device
- 1 x external CFast socket and 1 x SIM card socket
- Support +24VDC input; support ATX power mode

Product Overview

NEXCOM PC-based IoT controller solution NIFE 300 accelerates the migration of automation systems to cyber-physical systems for smart manufacturing. Boosted by Intel® Core™ i5-6500TE and i7-6700TE processors (formerly codenamed Skylake-S), the NIFE 300's open architecture features high interoperability to provide a unified infrastructure, communication network, and programming tool for factory floors and company offices, regaining speed, efficiency, and agility in manufacturing.

The 6th generation Intel® Core™ processors utilizing Intel's 14nm process have integrated Intel® HD Graphics and the latest generation interfaces including DDR4 2133. NIFE 300 excellent performance is suited for graphic- and compute-intensive applications such as motion control and machine vision, while the 4K2K support enables human machine interface (HMI) to show exquisite details of working pieces and 3D simulation of working processes.

NIFE 300 also meets PLCopen® specifications and allows easy control programming via Softlogic tool kit. Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC and IoT controllers.

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type processors
  - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache (maximum frequency 3.4GHz if turbo boost enabled)
  - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache (maximum frequency 3.3GHz if turbo boost enabled)
  - Core™ i3-6100TE, Quad Core, 2.7GHz, 4M Cache (no turbo boost)
  - Pentium G4400TE, Dual Core, 2.4GHz, 3M Cache (no turbo boost)
  - Celeron® G3900TE, Dual Core, 2.3GHz, 2M Cache (no turbo boost)

Main Memory

- 2 x DDR4 SO-DIMM socket, supports 2133MHz and up to 8GB with un-buffered and non-ECC type

Display Option

- Dual independent display
  - HDMI + DVI-D

Front I/O Interface Status LEDs

- 1 x Battery/1 x C-Fast LEDs
- 4 x GPO status/2 x Tx/Rx LEDs
- 1 x Power/1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x HDMI and 1 x DVI-D
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes for WI-FI/ GSM
- 1 x Front access 2.5" HDD tray
- 1 x mini-PCIe expansion support optional modules
- 2 x RS232/422/485 auto with 2.5KV Isolation
- 3 x Intel® I210-IT GbE LAN ports, support WoL, teaming and PXE

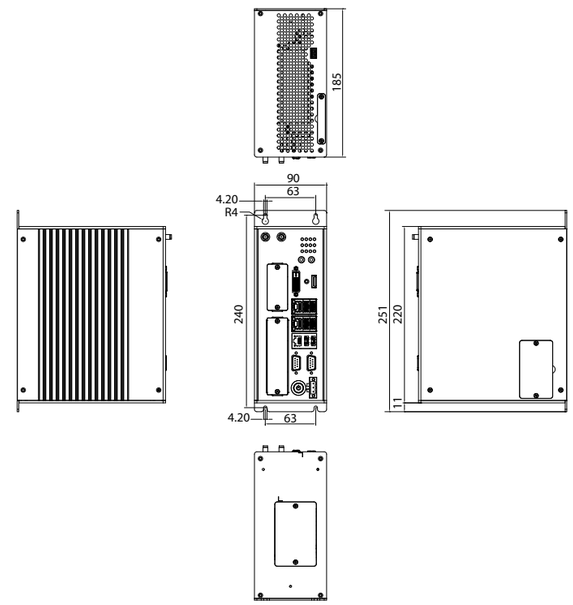
Top I/O Interface

- 1 x 3-pin remote switch
- 1 x CFast expansion
- 1 x SIM card

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x 2.5" HDD (external, SATA 3.0)
- 1 x 2.5" HDD (internal, SATA 3.0)
- 1 x mSATA (via internal mini-PCIe socket)

Dimension Drawing



Expansion Slot

- NIFE 300: no expansion
- NIFE 300P2: two PCI expansion slots
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300P2E: one PCI expansion slot, and one PCIe x8 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E2: one PCIe x8 and one PCIe x4 slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E16: one PCIe x16 expansion slot
  - Add-on card length: 180mm
  - Power consumption: 30W/slot max
- NIFE 300P3: two PCI expansion slots and one PCIe x8 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E3: one PCIe x8 and two PCIe x4 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max

Power Requirement

- AT/ ATX power mode (default with ATX power mode)
- Power input: typical +24VDC ±20%, with reverse polarity protection
- Power adapter: optional AC to DC power adapter (+24Vdc, 120W)

Dimensions

- NIFE 300: 90 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P2: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P2E: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E2: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E16: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P3: 175 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E3: 175 mm(W) x 185mm (D) x 251mm (H)

Construction

- Aluminum and metal chassis with front access design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-27
  - CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-64

Certifications

- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A
- LVD

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 Enterprise 64-bit

Ordering Information

- **NIFE 300 system (P/N: 10J70030000X0)**
- **NIFE 300P2 system (P/N: 10J70030001X0)**
- **NIFE 300P2E system (P/N: 10J70030002X0)**
- **NIFE 300E2 system (P/N: 10J70030012X0)**
- **NIFE 300E16 system (P/N: 10J70030004X0)**
- **NIFE 300P3 system (P/N: 10J70030003X0)**
- **NIFE 300E3 system (P/N: 10J70030008X0)**
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120022X00)**

NIFE 300P2/P2E/E2/E16

6th Generation Intel® Core™ i7/i5/i3
LGA Automation System with PCI/PCIe Expansions

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Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 LGA1151 socket type processors
- Intel® Q170 PCH
- 1 x DVI-D, and 1 x HDMI for dual independent display support
- 3 x Intel® GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0, 2 x USB 2.0 and 2 x RS232/422/485 auto
- 1 x front access 2.5"SATA HDD tray
- 2 x mini-PCIe socket support optional modules and mSATA device
- 1 x external CFast socket and 1 x SIM card socket
- 2 x PCI/PCIe expansions
- Support +24VDC input; support ATX power mode

Product Overview

NEXCOM PC-based IoT controller solution NIFE 300 accelerates the migration of automation systems to cyber-physical systems for smart manufacturing. Boosted by Intel® Core™ i5-6500TE and i7-6700TE processors (formerly codenamed Skylake-S), the NIFE 300's open architecture features high interoperability to provide a unified infrastructure, communication network, and programming tool for factory floors and company offices, regaining speed, efficiency, and agility in manufacturing.

The 6th generation Intel® Core™ processors utilizing Intel's 14nm process have integrated Intel® HD Graphics and the latest generation interfaces including DDR4 2133. NIFE 300 excellent performance is suited for graphic- and compute-intensive applications such as motion control and machine vision, while the 4K2K support enables human machine interface (HMI) to show exquisite details of working pieces and 3D simulation of working processes.

NIFE 300 also meets PLCopen® specifications and allows easy control programming via Softlogic tool kit. Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC and IoT controllers.

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type processors
  - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache (maximum frequency 3.4GHz if turbo boost enabled)
  - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache (maximum frequency 3.3GHz if turbo boost enabled)
  - Core™ i3-6100TE, Dual Core, 2.7GHz, 4M Cache (no turbo boost)
  - Pentium G4400TE, Dual Core, 2.4GHz, 3M Cache (no turbo boost)
  - Celeron® G3900TE, Dual Core, 2.3GHz, 2M Cache (no turbo boost)

Main Memory

- 2 x DDR4 SO-DIMM socket, supports 2133MHz and up to 8GB with un-buffered and non-ECC type

Display Option

- Dual independent display
  - HDMI + DVI-D

Front I/O Interface Status LEDs

- 1 x Battery/1 x C-Fast LEDs
- 4 x GPO status/2 x Tx/Rx LEDs
- 1 x Power/1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x HDMI and 1 x DVI-D
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes for WI-FI/ GSM
- 1 x Front access 2.5" HDD tray
- 1 x mini-PCIe expansion support optional modules
- 2 x RS232/422/485 auto with 2.5KV Isolation
- 3 x Intel® I210-IT GbE LAN ports, support WoL, teaming and PXE

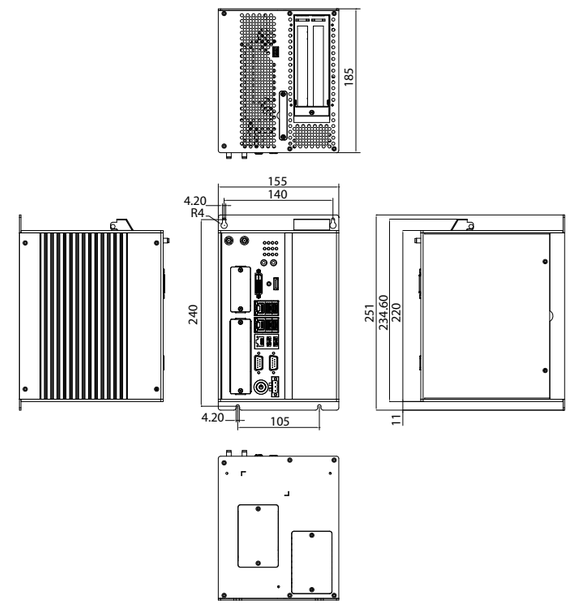
Top I/O Interface

- 1 x 3-pin remote switch
- 1 x CFast expansion
- 1 x SIM card

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x 2.5" HDD (external, SATA 3.0)
- 1 x 2.5" HDD (internal, SATA 3.0)
- 1 x mSATA (via internal mini-PCIe socket)

Dimension Drawing



Expansion Slot

- NIFE 300: no expansion
- NIFE 300P2: two PCI expansion slots
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300P2E: one PCI expansion slot, and one PCIe x8 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E2: one PCIe x8 and one PCIe x4 slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E16: one PCIe x16 expansion slot
  - Add-on card length: 180mm
  - Power consumption: 30W/slot max
- NIFE 300P3: two PCI expansion slots and one PCIe x8 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E3: one PCIe x8 and two PCIe x4 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max

Power Requirement

- AT/ ATX power mode (default with ATX power mode)
- Power input: typical +24VDC ±20%, with reverse polarity protection
- Power adapter: optional AC to DC power adapter (+24Vdc, 120W or 180W)

Dimensions

- NIFE 300: 90 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P2: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P2E: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E2: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E16: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P3: 175 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E3: 175 mm(W) x 185mm (D) x 251mm (H)

Construction

- Aluminum and metal chassis with front access design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-27
  - CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-64

Certifications

- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A
- LVD

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 Enterprise 64-bit

Ordering Information

- **NIFE 300 system (P/N: 10J70030000X0)**
- **NIFE 300P2 system (P/N: 10J70030001X0)**
- **NIFE 300P2E system (P/N: 10J70030002X0)**
- **NIFE 300E2 system (P/N: 10J70030012X0)**
- **NIFE 300E16 system (P/N: 10J70030004X0)**
- **NIFE 300P3 system (P/N: 10J70030003X0)**
- **NIFE 300E3 system (P/N: 10J70030008X0)**
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120022X00)**

NIFE 300P3/E3

6th Generation Intel® Core™ i7/i5/i3 LGA Automation System with Expansions

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Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 LGA1151 socket type processors
- Intel® Q170 PCH
- 1 x DVI-D, and 1 x HDMI for dual independent display support
- 3 x Intel® GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0, 2 x USB 2.0 and 2 x RS232/422/485 auto
- 1 x Front access 2.5"SATA HDD tray
- 2 x mini-PCIe socket support optional modules and mSATA device
- 1 x External CFast socket and 1 x SIM card socket
- Support PCI/ PCIe expansions
- Support +24VDC input; support ATX power mode

Product Overview

NEXCOM PC-based IoT controller solution NIFE 300 accelerates the migration of automation systems to cyber-physical systems for smart manufacturing. Boosted by Intel® Core™ i5-6500TE and i7-6700TE processors (formerly codenamed Skylake-S), the NIFE 300's open architecture features high interoperability to provide a unified infrastructure, communication network, and programming tool for factory floors and company offices, regaining speed, efficiency, and agility in manufacturing.

The 6th generation Intel® Core™ processors utilizing Intel's 14nm process have integrated Intel® HD Graphics and the latest generation interfaces including DDR4 2133. NIFE 300 excellent performance is suited for graphic- and compute-intensive applications such as motion control and machine vision, while the 4K2K support enables human machine interface (HMI) to show exquisite details of working pieces and 3D simulation of working processes.

NIFE 300 also meets PLCopen® specifications and allows easy control programming via Softlogic tool kit. Using libraries of reusable logic and motion functionality, control schemes can be developed with reduced programming efforts for fast deployment of SoftPLC and IoT controllers.

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type processors
  - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache (maximum frequency 3.4GHz if turbo boost enabled)
  - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache (maximum frequency 3.3GHz if turbo boost enabled)
  - Core™ i3-6100TE, Dual Core, 2.7GHz, 4M Cache (no turbo boost)
  - Pentium G4400TE, Dual Core, 2.4GHz, 3M Cache (no turbo boost)
  - Celeron® G3900TE, Dual Core, 2.3GHz, 2M Cache (no turbo boost)

Main Memory

- 2 x DDR4 SO-DIMM socket, supports 2133MHz and up to 8GB with un-buffered and non-ECC type

Display Option

- Dual independent display
  - HDMI + DVI-D

Front I/O Interface Status LEDs

- 1 x Battery/1 x C-Fast LEDs
- 4 x GPO status/2 x Tx/Rx LEDs
- 1 x Power/1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x HDMI and 1 x DVI-D
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes for WI-FI/GSM
- 1 x Front access 2.5" HDD tray
- 1 x mini-PCIe expansion support optional modules
- 2 x RS232/422/485 auto with 2.5KV Isolation
- 3 x Intel® I210-IT GbE LAN ports, support WoL, teaming and PXE

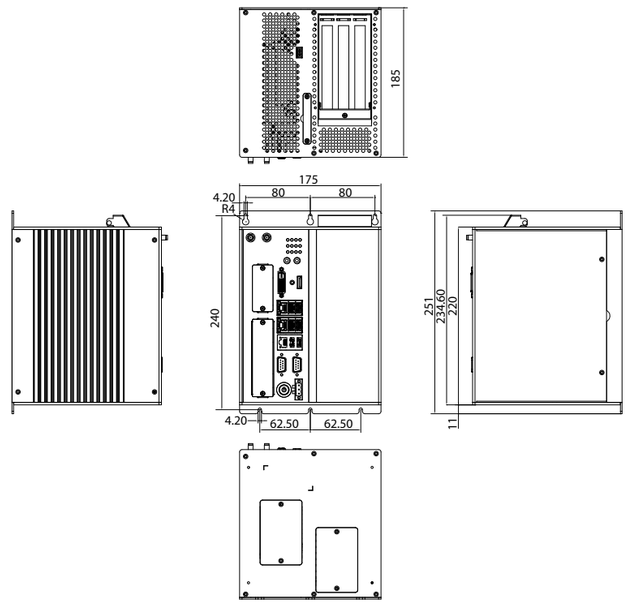
Top I/O Interface

- 1 x 3-pin remote switch
- 1 x CFast expansion
- 1 x SIM card

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x 2.5" HDD (external, SATA 3.0)
- 1 x 2.5" HDD (internal, SATA 3.0)
- 1 x mSATA (via internal mini-PCIe socket)

Dimension Drawing



Expansion Slot

- NIFE 300: no expansion
- NIFE 300P2: two PCI expansion slots
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300P2E: one PCI expansion slot, and one PCIe x8 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E2: one PCIe x8 and one PCIe x4 slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E16: one PCIe x16 expansion slot
  - Add-on card length: 180mm
  - Power consumption: 30W/slot max
- NIFE 300P3: two PCI expansion slots and one PCIe x8 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max
- NIFE 300E3: one PCIe x8 and two PCIe x4 expansion slot
  - Add-on card length: 180mm max
  - Power consumption: 10W/slot max

Power Requirement

- AT/ATX power mode (default with ATX power mode)
- Power input: typical +24VDC ±20%, with reverse polarity protection
- Power adapter: optional AC to DC power adapter (+24Vdc, 120W or 180W)

Dimensions

- NIFE 300: 90 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P2: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P2E: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E2: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E16: 155 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300P3: 175 mm(W) x 185mm (D) x 251mm (H)
- NIFE 300E3: 175 mm(W) x 185mm (D) x 251mm (H)

Construction

- Aluminum and metal chassis with front access design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-27
  - CFast: 50G, half sine, 11ms, IEC60068-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-64

Certifications

- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A
- LVD

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 Enterprise 64-bit

Ordering Information

- **NIFE 300 system (P/N: 10J70030000X0)**
- **NIFE 300P2 system (P/N: 10J70030001X0)**
- **NIFE 300P2E system (P/N: 10J70030002X0)**
- **NIFE 300E2 system (P/N: 10J70030012X0)**
- **NIFE 300E16 system (P/N: 10J70030004X0)**
- **NIFE 300P3 system (P/N: 10J70030003X0)**
- **NIFE 300E3 system (P/N: 10J70030008X0)**
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120022X00)**

eTOP504

4.3" Widescreen TFT WQVGA HMI Panel PC with Touchscreen

ASIA ONLY

Main Features

- 4.3" TFT color display, LED backlight
- 480 x 272 pixel resolution, 64K colors
- Resistive touchscreen
- 2 Ethernet ports with switch function
- USB host ports
- SD card slot
- Multistandard serial port
- Connection to fieldbus systems and I/O using optional plug-in modules

Product Overview

As a partner of well-known EXOR International S.p.A., NEXCOM integrates EXOR's HMI solution into eTOP HMI series. The eTOP Series 500 HMI products combine state-of-the-art features and top performance with an outstanding design. They are the ideal choice for all demanding HMI applications including factory and building automation. The eTOP504 features a bright 4:3" TFT widescreen display with a fully dimmable LED backlight. The JMobile software offers full vector graphic capabilities and plenty of connectivity options.

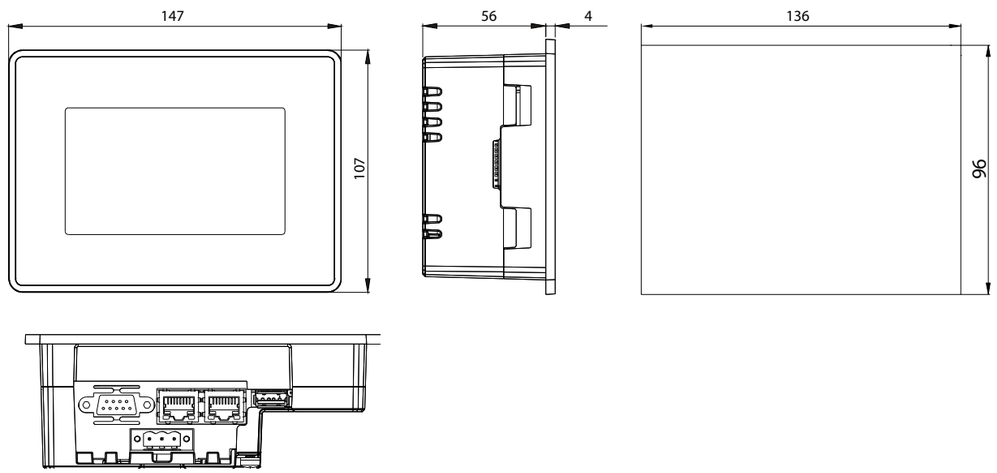
JMobile runtime included. Full compatibility with JMobile Studio.

- Full vector graphic support. Native support of SVG graphic objects. Transparency and alpha blending.
- Multilanguage applications. Easily create and manage your applications in multiple languages to meet global requirements. Far East languages are supported. Tools available in JMobile Studio support easy third-party translations and help reducing development and maintenance costs of the application.
- Data display in numerical, text, bargraph, analog gauges and graphic image formats.
- Rich set of state-of-the-art HMI features: data acquisition, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, users and passwords, e-mail and RSS feeds, rotating menus
- Includes support for a wide range of communication drivers for Factory and Building Automation systems.
- Multiple drivers communication capability
- Remote monitoring and control. Client- Server functionality. Mobile clients supported.
- Remote maintenance and support with VNC-based functionality.
- Off-line simulation of the HMI application with JMobile Studio.
- Powerful scripting language for automating HMI applications. Script debugging improves efficiency in application development.
- Rich gallery of symbols and objects.
- Project templates
- Optional plug-in modules for fieldbus systems, I/O and controllers.
- Display backlight dimmable to 0%.

Specifications

Technical Data	eTOP504	Technical Data	eTOP504
Panel	- 4.3", 16:9, WQVGA, 480 x 272 - Luminance: 150 cd/m² typ. - LCD color: 64K - Active display area: 4.3" diagonal (95.4 x 53.9mm) - Backlight: LED	Operator Interface	- Touch: Resistive - LED indicators: 1 (dual color)
		System Resources	- Operating system: Microsoft Windows CE 6.0 - User memory: 128 MB flash - RAM: 256MB DDR

Dimension Drawing



Technical Data	eTOP504	Technical Data	eTOP504
Interface	- Ethernet: 2 x 10/100Mbit with integrated switch - USB: 1 x host interface - Serial: 1 x RS232/422/485 software configuration - Expansion slot: 1 x optional plug-in - Memory card: 1 x SD card slot	Ratings	- Power supply voltage: 24Vdc (10 to 32 Vdc) - Current consumption: 0.55A at 24Vdc (max.) - Fuse: Automatic - Weight: Approx. 1Kg - Battery: Rechargeable Lithium battery, not user- replaceable
Functionality	- Historical event list: Yes - Users and passwords: Yes - Hardware real-time clock: Yes, with battery back-up - Screen saver: Yes - Buzzer: Yes, audible feedback for touch screen - Vector graphic: Yes, includes SVG support - Object dynamics: Yes, visibility, opacity, position, size, rotation for most object types - Multiple driver communication: Yes - Data acquisition and trend presentation: Yes, flash memory storage limited only by available memory - Multilanguage: Yes, with runtime language switching - Recipes: Yes, flash memory storage limited only by available memory - Alarms: Yes	Environmental Conditions	- Operating temperature: 0°C to 50°C (vertical installation) - Storage temperature: -20°C to 70°C - Operating and storage humidity: 5%~85%, relative humidity, non-condensing - Protection class: IP66 (front), IP20 (rear)
		Dimensions	- Faceplate LxH: 147 x 107 mm - Cutout AxB: 136 x 96 mm - Depth D+T: 56 + 4 mm
		Certifications	- CE (Emission EN61000-6-4; Immunity EN61000-6-2 for installation in industrial environments) - DNV Type Approval Certificate - cULus (UL508 Listed Haz. Loc. Class I, Division 2, Group A,B,C, and D) - C-Tick

Ordering Information

- **eTOP504 (P/N: 79IE050401X00) +ETOP504U3P1**
  4.3" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile run-time.

* Note: This product is only for Taiwan, China, Thailand, Vietnam, Philippines, Korea, UAE and Saudi Arabia.

eTOP507

7" Widescreen TFT WVGA HMI Panel PC with Touchscreen

ASIA ONLY

Main Features

- 7" TFT color display, LED backlight
- 800 x 480 pixel (WVGA) resolution, 64K colors
- Resistive touchscreen
- 2 Ethernet ports with switch function
- 2 USB Host ports
- SD card slot
- Connection to fieldbus systems and I/O using optional plug-in modules
- Slim design. Mounting depth less than 50mm

Product Overview

As a partner of well-known EXOR International S.p.A., NEXCOM integrates EXOR's HMI solution into eTOP HMI series. The eTOP Series 500 HMI products combine state-of-the-art features and top performance with an outstanding design. They are the ideal choice for all demanding HMI applications including factory and building automation. The eTOP507 features a bright 7" TFT widescreen (16:9) display with a fully dimmable LED backlight. The JMobile software offers full vector graphic capabilities and plenty of connectivity options.

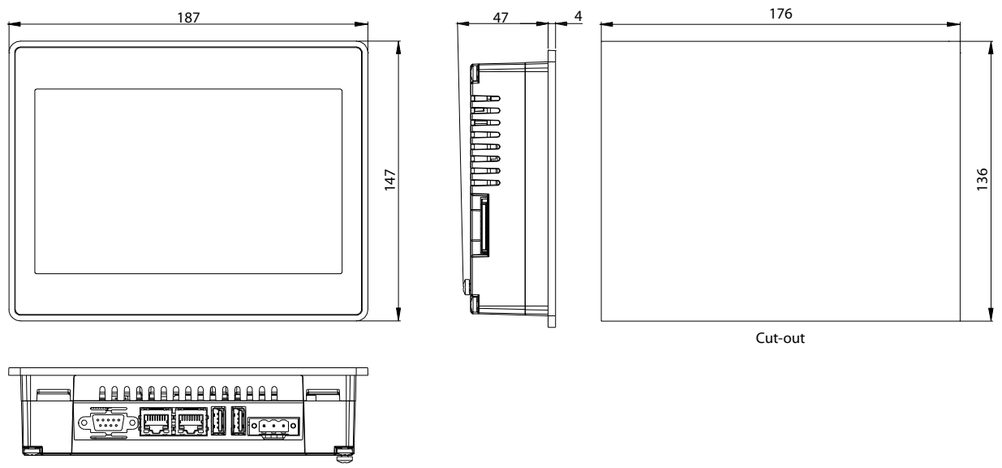
JMobile runtime included. Full compatibility with JMobile Studio.

- Full vector graphic support. Native support of SVG graphic objects. Transparency and alpha blending.
- Multilanguage applications. Easily create and manage your applications in multiple languages to meet global requirements. Far East languages are supported. Tools available in JMobile Studio support easy third-party translations and help reducing development and maintenance costs of the application.
- Data display in numerical, text, bargraph, analog gauges and graphic image formats.
- Rich set of state-of-the-art HMI features: data acquisition, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, users and passwords, e-mail and RSS feeds, rotating menus
- Includes support for a wide range of communication drivers for Factory and Building Automation systems.
- Multiple drivers communication capability
- Remote monitoring and control. Client- Server functionality. Mobile clients supported.
- Remote maintenance and support with VNC-based functionality.
- Off-line simulation of the HMI application with JMobile Studio.
- Powerful scripting language for automating HMI applications. Script debugging improves efficiency in application development.
- Rich gallery of symbols and objects.
- Project templates
- Optional plug-in modules for fieldbus systems, I/O and controllers.
- Display backlight dimmable to 0%.

Specifications

Technical Data	eTOP507	Technical Data	eTOP507
Panel	- 7", 16:9, WVGA, 800 x 480 - Luminance: 300 cd/m² typ. - LCD color: 64K - Active display area: 7" diagonal - Backlight: LED	Operator Interface	- Touch: Resistive - LED indicators: 1 (dual color)
		System Resources	- Operating system: Microsoft Windows CE 6.0 - User memory: 128 MB flash - RAM: 256MB DDR

Dimension Drawing



Technical Data	eTOP507	Technical Data	eTOP507
Interface	- Ethernet: 2 x 10/100Mbit with integrated switch - USB: 2 x host interface (1 version 2.0, 1 version 2.0 and 1.1) - Serial: 1 x RS232/422/485 software configuration - Expansion slot: 2 x optional plug-in - Memory card: 1 x SD card slot	Ratings	- Power supply voltage: 24Vdc (10 to 32 Vdc) - Current consumption: 0.65A at 24Vdc (max.) - Fuse: Automatic - Weight: Approx. 1Kg - Battery: Rechargeable Lithium battery, not user- replaceable
Functionality	- Historical event list: Yes - Users and passwords: Yes - Hardware real-time clock: Yes, with battery back-up - Screen saver: Yes - Buzzer: Yes, audible feedback for touch screen - Vector graphic: Yes, includes SVG support - Object dynamics: Yes, visibility, opacity, position, size, rotation for most object types - Multiple driver communication: Yes - Data acquisition and trend presentation: Yes, flash memory storage limited only by available memory - Multilanguage: Yes, with runtime language switching - Recipes: Yes, flash memory storage limited only by available memory - Alarms: Yes	Environmental Conditions	- Operating temperature: 0°C to 50°C (vertical installation) - Storage temperature: -20°C to 70°C - Operating and storage humidity: 5%~85%, relative humidity, non-condensing - Protection class: IP66 (front), IP20 (rear)
		Dimensions	- Faceplate LxH: 187 x 147 mm - Cutout AxB: 176 x 136 mm - Depth D+T: 47 + 4 mm
		Certifications	- CE (Emission EN61000-6-4; Immunity EN61000-6-2 for installation in industrial environments) - DNV Type Approval Certificate - cULus (UL508 Listed Haz. Loc. Class I, Division 2, Group A,B,C, and D) - C-Tick - GL (Germanischer Lloyd Type Approval Certificate)

Ordering Information

- **eTOP507 (P/N: 79IE050701X00) +ETOP507U3P3**
  7" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile run-time.
- **eTOP507N (P/N: 10IE0050700X1)**
  7" widescreen TFT color touchscreen with Ethernet and USB interfaces. JMobile run-time. (Made in Taiwan)

* Note: This product is only for Taiwan, China, Thailand, Vietnam, Philippines, Korea, UAE and Saudi Arabia.

eTOP510

10.4" TFT SVGA HMI Panel PC with Touchscreen

ASIA ONLY

Main Features

- 10.4" TFT color display, LED backlight
- 800 x 600 pixel (SVGA) resolution, 64K colors
- Resistive touchscreen
- 2 Ethernet ports with switch function
- 2 USB host ports
- SD card slot
- Connection to fieldbus systems and I/O using optional plug-in modules
- Slim design. Mounting depth less than 50mm

Product Overview

As a partner of well-known EXOR International S.p.A., NEXCOM integrates EXOR's HMI solution into eTOP HMI series. The eTOP Series 500 HMI products combine state-of-the-art features and top performance with an outstanding design. They are the ideal choice for all demanding HMI applications including factory and building automation. The eTOP510 features a bright 10.4" TFT display with a fully dimmable LED backlight. The JMobile software offers full vector graphic capabilities and plenty of connectivity options.

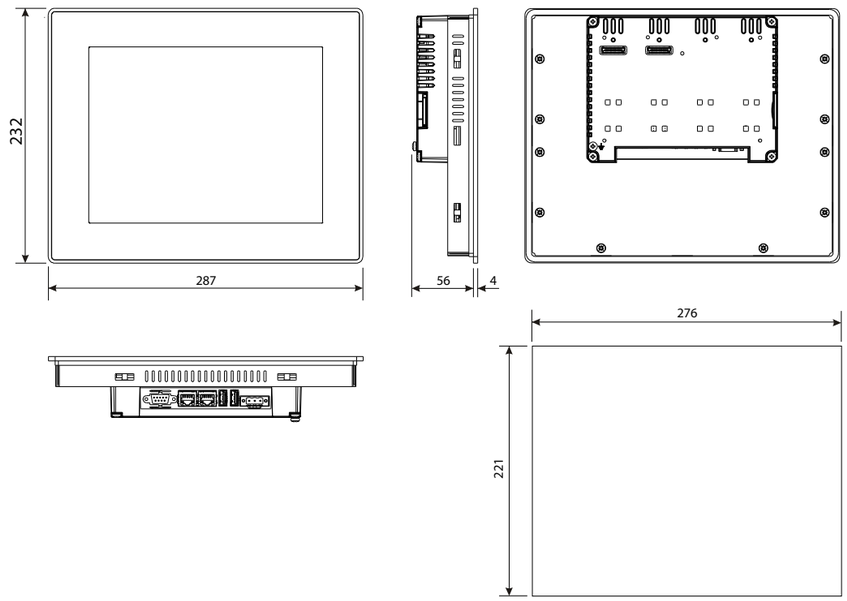
JMobile runtime included. Full compatibility with JMobile Studio.

- Full vector graphic support. Native support of SVG graphic objects. Transparency and alpha blending.
- Full object dynamics: control visibility and transparency, move, resize, rotate any object on screen. Change properties of basic and complex objects.
- Multilanguage applications. Easily create and manage your applications in multiple languages to meet global requirements. Far East languages are supported. Tools available in JMobile Studio support easy third-party translations and help reducing development and maintenance costs of the application
- Data display in numerical, text, bargraph, analog gauges and graphic image formats.
- Rich set of state-of-the-art HMI features: data acquisition, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, users and passwords, e-mail and RSS feeds, rotating menus.
- Includes support for a wide range of communication drivers for Factory and Building Automation systems.
- Multiple drivers communication capability.
- Remote monitoring and control. Client- Server functionality. Mobile clients supported.
- Remote maintenance and support with VNC-based functionality.
- Off-line simulation of the HMI application with JMobile Studio.
- Powerful scripting language for automating HMI applications. Script debugging improves efficiency in application development.
- Rich gallery of symbols and objects.
- Project templates
- Optional plug-in modules for fieldbus systems, I/O and controllers.
- Display backlight dimmable to 0%.

Specifications

Technical Data	eTOP510	Technical Data	eTOP510
Panel	- 10.4", 4:3, SVGA, 800 x 600 - Luminance: 300 cd/m² typ. - LCD Color: 64K - Active display area: 10.4" diagonal - Backlight: LED	Operator Interface	- Touch: Resistive - LED indicators: 1 (dual color)
		System Resources	- Operating system: Microsoft Windows CE 6.0 - User memory: 256 MB flash - RAM: 256MB DDR

Dimension Drawing



Technical Data	eTOP510	Technical Data	eTOP510
Interface	- Ethernet: 2 x 10/100Mbit with integrated switch - USB: 2 x host interface (1 version 2.0, 1 version 2.0 and 1.1) - Serial: 1 x RS232/422/485 software configuration - Expansion slot: 2 x optional plug-in - Memory card: 1 x SD card slot	Ratings	- Power supply voltage: 24Vdc (10 to 32 Vdc) - Current consumption: 0.95A at 24Vdc (max.) - Fuse: Automatic - Weight: Approx. 1Kg - Battery: Rechargeable Lithium battery, not user- replaceable
Functionality	- Historical event list: Yes - Users and passwords: Yes - Hardware real-time clock: Yes, with battery back-up - Screen saver: Yes - Buzzer: Yes, audible feedback for touch screen - Vector graphic: Yes, includes SVG support - Object dynamics: Yes, visibility, opacity, position, size, rotation for most object types - Multiple driver communication: Yes, max 2 drivers - Data acquisition and trend presentation: Yes, flash memory storage limited only by available memory - Multilanguage: Yes, with runtime language switching - Recipes: Yes, flash memory storage limited only by available memory - Alarms: Yes	Environmental Conditions	- Operating temperature: 0°C to 50°C (vertical installation) - Storage temperature: -20°C to 70°C - Operating and storage humidity: 5%~85%, relative humidity, non-condensing - Protection class: IP66 (front), IP20 (rear)
		Dimensions	- Faceplate LxH: 287 x 232 mm - Cutout AxB: 276 x 221 mm - Depth D+T: 56 + 4 mm
		Certifications	- CE (Emission EN61000-6-4; Immunity EN61000-6-2 for installation in industrial environments) - DNV Type Approval Certificate - cULus (UL508 Listed Haz. Loc. Class I, Division 2, Group A,B,C, and D) - C-Tick

Ordering Information

- **eTOP510 (P/N: 79IE051001X00) +ETOP510U3P1**
  10"4 TFT color touchscreen with Ethernet and USB interfaces. JMobile run-time.

* Note: This product is only for Taiwan, China, Thailand, Vietnam, Philippines, Korea, UAE and Saudi Arabia.

eSMART04

4.3" Widescreen TFT WQVGA HMI Panel PC
with Touchscreen

ASIA ONLY

Main Features

- 4.3" TFT color display, LED backlight
- 480 x 272 pixel (WQVGA) resolution, 64K colors
- Resistive touchscreen
- 1 x Ethernet port
- 1 x USB host port
- 1 x RS232/422/485 communication port
- Extremely cost efficient HMI with plastic chassis
- Slim design. Mounting depth less than 30mm

Product Overview

The eSMART Series HMI products combine state-of-the-art features and top performance with an outstanding design. They are the ideal choice for adding affordable functionality and control to your system. The eSMART04 features a bright 4.3" TFT widescreen (16:9) display with a fully dimmable LED backlight. The JMobile software offers full vector graphic capabilities and plenty of connectivity options.

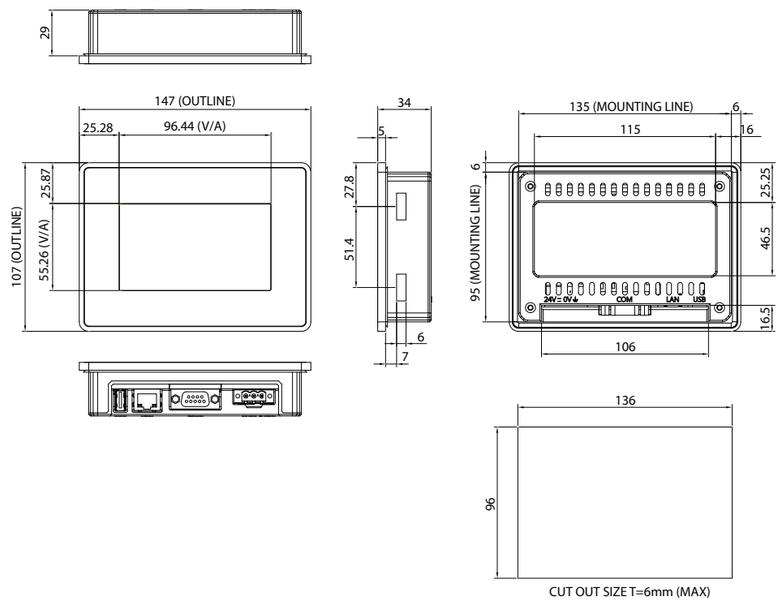
Hightlight

- JMobile runtime included. Full compatibility with JMobile Studio
- Full vector graphic support. Native support of SVG graphic objects. Transparency and alpha blending
- Multilanguage applications. Easily create and manage your applications in multiple languages to meet global requirements. Far East languages are supported. Tools available in JMobile studio support easy third-party translations and help reducing development and maintenance costs of the application
- Data display in numerical, text, bargraph, analog gauges and graphic image formats
- Rich set of state-of-the-art HMI features: data acquisition, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, users and passwords, e-mail and RSS feeds, rotating menus
- Includes support for a wide range of communication drivers for factory and building automation systems
- Multiple drivers communication capability
- Remote monitoring and control. Client- server functionality. Mobile clients supported
- Remote maintenance and support with VNC-based functionality
- Off-line simulation of the HMI application with JMobile studio
- Powerful scripting language for automating HMI applications. Script debugging improves efficiency in application development
- Rich gallery of symbols and objects
- Project templates
- Optional plug-in modules for fieldbus systems, I/O and controllers
- Display backlight dimmable to 0%

Specifications

Technical Data	eSMART04	Technical Data	eSMART04
Panel	- 4.3", 16:9, WQVGA, 480 x 272 - Luminance: 200 cd/m² typ. - LCD color: 64K - Active display area: 4.3" diagonal - Backlight: LED	Ratings	- Power supply voltage: 24Vdc (18 to 32 Vdc) - Current consumption: 0.3A at 24Vdc (max.) - Fuse: Automatic - Weight: Approx. 0.6Kg
Operator Interface	- Touch: Resistive		

Dimension Drawing



Technical Data	eSMART04	Technical Data	eSMART04
System Resources	- CPU: ARM Cortex A8 300 MHz - Operating system: Linux 3.12 - RAM: 256MB DDR - Flash: 2 GB - Application memory: 60MB - Real-time clock: Yes - RTC backup: Supercapacitor - Buzzer: Yes	Environmental Conditions	- Operating temperature: 0°C to 50°C (vertical installation) - Storage temperature: -20°C to 70°C - Operating and storage humidity: 5%~85%, relative humidity, non-condensing - Protection class: IP66 (front), IP20 (rear)
		Dimensions	- Faceplate LxH: 147 x 107mm - Cutout AxB: 136 x 96mm - Depth D+T: 29 + 5mm
Interface	- Ethernet: 1 x 10/100Mbit - USB: 1 x host V2.0, max. 500 mA - Serial: 1 x RS232/422/485 software configuration	Certifications	- CE (Emission EN61000-6-4; Immunity EN61000-6-2 for installation in industrial environments) - CE (Emission EN61000-6-3; Immunity EN61000-6-1 for installation in residential environments) - cULus (UL508 Listed) - cULus: Class I Div 2 - ATEX: Zone 2: II 3G Ex ic ee IIC T6 Gc - DNV-GL - EU RO MR - RCM

Ordering Information

- **eSMART04 (P/N: A0IE0000403X1)**
  10IE0000403X1 +ESMA04U301 & 6014500134X00 License Label
  4.3" widescreen TFT WQVGA touchscreen with Ethernet and USB interfaces. JMobile run-time

* Note: This product is only for Taiwan, China, Thailand, Vietnam, Philippines, Korea, UAE and Saudi Arabia.

eSMART07M

7" Widescreen TFT WVGA HMI Panel PC
with Touchscreen

ASIA ONLY

Main Features

- 7" TFT color display, LED backlight
- 800 x 480 pixel (WVGA) resolution, 64K colors
- Resistive touchscreen
- 1 x Ethernet port
- 1 x USB host port
- 1 x RS232/422/485 communication port
- Extremely cost efficient HMI with plastic chassis
- Slim design. Mounting depth less than 30mm

Product Overview

The eSMART Series HMI products combine state-of-the-art features and top performance with an outstanding design. They are the ideal choice for adding affordable functionality and control to your system. The eSMART07M features a bright 7" TFT widescreen (16:9) display with a fully dimmable LED backlight. The JMobile software offers full vector graphic capabilities and plenty of connectivity options.

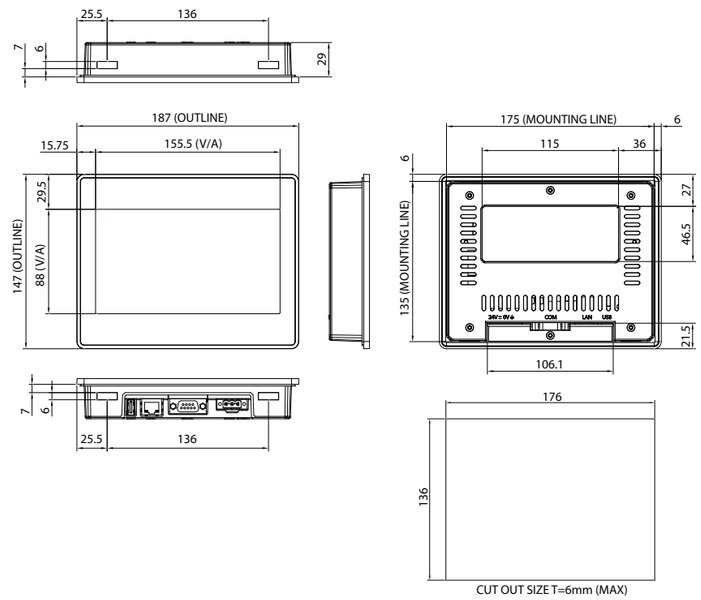
Hightlight

- JMobile runtime included. Full compatibility with JMobile Studio
- Full vector graphic support. Native support of SVG graphic objects. Transparency and alpha blending
- Multilanguage applications. Easily create and manage your applications in multiple languages to meet global requirements. Far east languages are supported. Tools available in JMobile studio support easy third-party translations and help reducing development and maintenance costs of the application
- Data display in numerical, text, bargraph, analog gauges and graphic image formats
- Rich set of state-of-the-art HMI features: data acquisition, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, users and passwords, e-mail and RSS feeds, rotating menus
- Includes support for a wide range of communication drivers for factory and building automation systems
- Multiple drivers communication capability
- Remote monitoring and control. Client- server functionality. Mobile clients supported
- Remote maintenance and support with VNC-based functionality
- Off-line simulation of the HMI application with JMobile studio
- Powerful scripting language for automating HMI applications. Script debugging improves efficiency in application development.
- Rich gallery of symbols and objects
- Project templates
- Optional plug-in modules for fieldbus systems, I/O and controllers
- Display backlight dimmable to 0%

Specifications

Technical Data	eSMART07M	Technical Data	eSMART07M
Panel	- 7", 16:9, WVGA, 800 x 480 - Luminance: 200 cd/m² typ. - LCD color: 64K - Active display area: 7" diagonal - Backlight: LED	Ratings	- Power supply voltage: 24Vdc (10 to 32 Vdc) - Current consumption: 0.3A at 24Vdc (max.) - Fuse: Automatic - Weight: Approx. 0.4Kg
Operator Interface	- Touch: Resistive		

Dimension Drawing



Technical Data	eSMART07M	Technical Data	eSMART07M
System Resources	- CPU: ARM Cortex A8 1 GHz - Operating system: Linux 3.12 - RAM: 512MB DDR - Flash: 4 GB - Application memory: 60MB - Real-time clock: Yes - RTC backup: Supercapacitor - Buzzer: Yes	Environmental Conditions	- Operating temperature: 0°C to 50°C (vertical installation) - Storage temperature: -20°C to 70°C - Operating and storage humidity: 5%~85%, relative humidity, non-condensing - Protection class: IP66 (front), IP20 (rear)
		Dimensions	- Faceplate LxH: 187 x 147 mm - Cutout AxB: 176 x 136 mm - Depth D+T: 29 + 5 mm
Interface	- Ethernet: 1 x 10/100Mbit - USB: 1 x host V2.0, max. 500 mA - Serial: 1 x RS232/422/485 software configuration	Certifications	- CE (Emission EN61000-6-4; Immunity EN61000-6-2 for installation in industrial environments) - CE (Emission EN61000-6-3; Immunity EN61000-6-1 for installation in residential environments) - cULus (UL508 Listed) - cULus: Class I Div 2 - ATEX: Zone 2: II 3G Ex ic ee IIC T6 Gc - DNV-GL - EU RO MR - RCM

Ordering Information

- **eSMART07M (P/N:A0IE0000704X1)**
  10IE0000704X1 +ESMA07MU301 & 6014500134X00 License Label
  7" widescreen TFT WVGA touchscreen with Ethernet and USB interfaces. JMobile run-time

* Note: This product is only for Taiwan, China, Thailand, Vietnam, Philippines, Korea, UAE and Saudi Arabia.

eSMART10

10.1" Widescreen TFT WSVGA HMI Panel PC
with Touchscreen

ASIA ONLY

Main Features

- 10.1"TFT color display, LED backlight
- 1024 x 600 pixel (WSVGA) resolution, 64K colors
- Resistive touchscreen
- 1 x Ethernet port
- 1 x USB host port
- 1 x RS232/422/485 communication port
- Extremely cost efficient HMI with plastic chassis
- Slim design. Mounting depth less than 30mm

Product Overview

The eSMART Series HMI products combine state-of-the-art features and top performance with an outstanding design. They are the ideal choice for adding affordable functionality and control to your system. The eSMART10 features a bright 10.1" TFT widescreen (16:9) display with a fully dimmable LED backlight. The JMobile software offers full vector graphic capabilities and plenty of connectivity options.

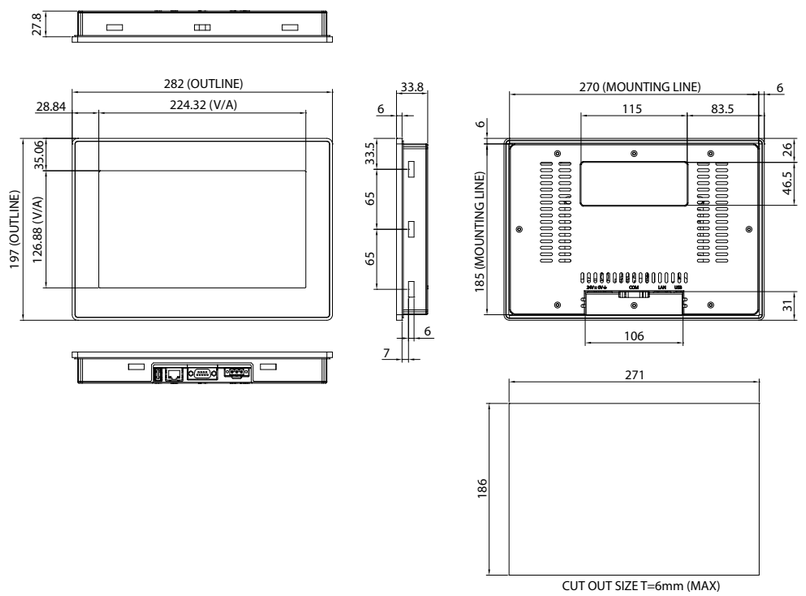
Hightlight

- JMobile runtime included. Full compatibility with JMobile Studio
- Full vector graphic support. Native support of SVG graphic objects. Transparency and alpha blending
- Multilanguage applications. Easily create and manage your applications in multiple languages to meet global requirements. Far east languages are supported. Tools available in JMobile studio support easy third-party translations and help reducing development and maintenance costs of the application
- Data display in numerical, text, bargraph, analog gauges and graphic image formats
- Rich set of state-of-the-art HMI features: data acquisition, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, users and passwords, e-mail and RSS feeds, rotating menus
- Includes support for a wide range of communication drivers for factory and building automation systems
- Multiple drivers communication capability
- Remote monitoring and control. Client- server functionality. Mobile clients supported
- Remote maintenance and support with VNC-based functionality
- Off-line simulation of the HMI application with JMobile studio
- Powerful scripting language for automating HMI applications. Script debugging improves efficiency in application development
- Rich gallery of symbols and objects
- Project templates
- Optional plug-in modules for fieldbus systems, I/O and controllers
- Display backlight dimmable to 0%

Specifications

Technical Data	eSMART10	Technical Data	eSMART10
Panel	- 10.1", 16:9, WSVGA, 1024 x 600 - Luminance: 200 cd/m² typ. - LCD color: 64K - Active display area: 10.1" diagonal - Backlight: LED	Ratings	- Power supply voltage: 24Vdc (10 to 32 Vdc) - Current consumption: 0.38A at 24Vdc (max.) - Fuse: Automatic - Weight: Approx. 1.0Kg
Operator Interface	- Touch: Resistive		

Dimension Drawing



Technical Data	eSMART10	Technical Data	eSMART10
System Resources	- CPU: ARM Cortex A8 1 GHz - Operating system: Linux 3.12 - RAM: 512MB DDR - Flash: 4 GB - Application memory: 60MB - Real-time clock: Yes - RTC backup: Supercapacitor - Buzzer: Yes	Environmental Conditions	- Operating temperature: 0°C to 50°C (vertical installation) - Storage temperature: -20°C to 70°C - Operating and storage humidity: 5%~85%, relative humidity, non-condensing - Protection class: IP66 (front), IP20 (rear)
		Dimensions	- Faceplate LxH: 282 x 197mm - Cutout AxB: 271 x 186mm - Depth D+T: 29 + 6mm
Interface	- Ethernet: 1 x 10/100Mbit - USB: 1 x host V2.0, max. 500 mA - Serial: 1 x RS232/422/485 software configuration	Certifications	- CE (Emission EN61000-6-4; Immunity EN61000-6-2 for installation in industrial environments) - CE (Emission EN61000-6-3; Immunity EN61000-6-1 for installation in residential environments) - cULus (UL508 Listed) - cULus: Class I Div 2 - ATEX: Zone 2: II 3G Ex ic ee IIC T6 Gc - DNV-GL - EU RO MR - RCM

Ordering Information

- **eSMART10 (P/N:A0IE0001002X1)**
  10IE0001002X1 +ESMA10U301 & 6014500135X00 License Label
  10.1" widescreen TFT WSVGA touchscreen with Ethernet and USB interfaces. JMobile run-time

* Note: This product is only for Taiwan, China, Thailand, Vietnam, Philippines, Korea, UAE and Saudi Arabia.

eLITE610

10.1" Widescreen WSVGA HMI Panel PC
with Intel Atom® x5-E3930

Main Features

- 10.1"TFT color display, LED backlight
- 1024 x 600 pixel (WSVGA) resolution, 16.7M colors
- Resistive touchscreen
- 2 x Giga LAN and 2 x USB 3.0
- 1 x RS232/422/485 communication port
- Extremely cost efficient HMI with plastic chassis
- Slim design, mounting depth less than 30mm
- System frame ground protection (GPE) design

Product Overview

The eLITE610 is Intel Atom x5-E3930 high performance HMI with the JMobile software offers full vector graphic capabilities and plenty of connectivity options. The eLITE610 features a bright 10.1" TFT widescreen (16:9) display with 2 Giga LAN and 2 USB 3.0.

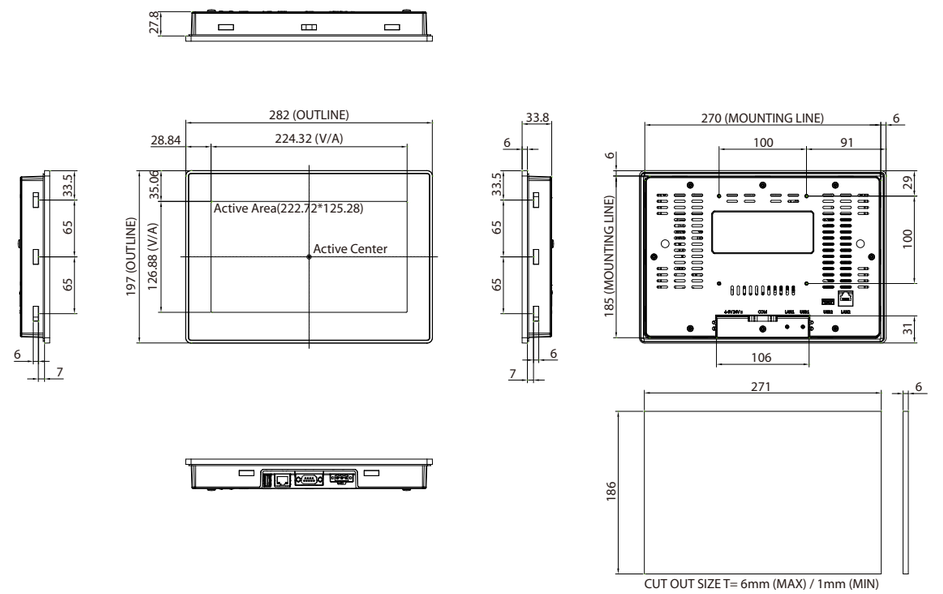
Hightlight

- JMobile runtime included. Full compatibility with JMobile Studio
- Full vector graphic support. Native support of SVG graphic objects. Transparency and alpha blending
- Multilanguage applications. Easily create and manage your applications in multiple languages to meet global requirements. Far east languages are supported. Tools available in JMobile studio support easy third-party translations and help reducing development and maintenance costs of the application
- Data display in numerical, text, bargraph, analog gauges and graphic image formats
- Rich set of state-of-the-art HMI features: data acquisition, alarm handling, scheduler and timed actions (daily and weekly schedulers, exception dates), recipes, users and passwords, e-mail and RSS feeds, rotating menus
- Includes support for a wide range of communication drivers for factory and building automation systems
- Multiple drivers communication capability
- Remote monitoring and control. Client- server functionality. Mobile clients supported
- Remote maintenance and support with VNC-based functionality
- Off-line simulation of the HMI application with JMobile studio
- Powerful scripting language for automating HMI applications. Script debugging improves efficiency in application development
- Rich gallery of symbols and objects
- Project templates
- Optional plug-in modules for fieldbus systems, I/O and controllers
- Display backlight dimmable to 0%

Specifications

Technical Data	eLITE610	Technical Data	eLITE610
Panel	- 10.1", 16:9, WSVGA, 1024 x 600 - Luminance: 240 cd/m² typ. - LCD color: 16.7M - Active display area: 10.1" diagonal - Backlight: LED	Ratings	- Power supply voltage: 24 Vdc (19.2 to 28.8 Vdc) - Current consumption: 1.64A at 24Vdc (max.) - Weight: Approx. 1.37Kg

Dimension Drawing



Technical Data	eLITE610	Technical Data	eLITE610
Operator Interface	- Touch: resistive	Environmental Conditions	- Operating temperature: -5°C to 50°C - Storage temperature: -20°C to 70°C - Operating and storage humidity: 5%~85% relative humidity, noncondensing - Panel/VESA mounting - Protection class: IP66 (front), IP20 (rear)
System Resources	- CPU: Intel Atom® x5-E3930 processor - Operating System: Windows 10 Enterprise (64-bit) - RAM: 4GB DDR3L - Flash: 32 GB - Real time clock: Yes - Buzzer: Yes	Dimensions	- Faceplate LxH: 282 x 197mm - Cutout AxB: 271 x 186mm - Depth D+T: 29 + 6mm
Interface	- Ethernet: 2x 10/100/1000Mbit - USB: 2 x USB 3.0 - Serial: 1 x RS232/422/485 BIOS configuration	Certifications	- CE (Emission EN61000-6-4; Immunity EN61000-6-2 for installation in industrial environments) - FCC

Ordering Information

Barebone

- **eLITE610 (P/N: 10IE0061000X0)**
  10.1" widescreen WSVGA with Intel Atom® x5-E3930, Ethernet and USB 3.0 interfaces, JMobile run-time
- **eLITE610-NH (P/N: 10IE0061001X0)**
  10.1" widescreen WSVGA with Intel Atom® x5-E3930, Ethernet and USB 3.0 interfaces

IPPC 1040P

10.1" TFT WXGA 16:9 Heavy Industrial Panel PC
with Intel® Celeron® Quad Core Processor J1900, up to 2.42GHz,
Multi-Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- Intel® Celeron® quad core processor J1900, up to 2.42GHz, 2M L2 cache
- Metal housing with robust aluminum front zero bezel for harsh environment
- 10 points P-Cap multi-touch with zero bezel flush front design
- Dual GbE/2nd display-VGA/ Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP66 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

The 10.1" fanless panel PC IPPC 1040P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1280 x 800 (WXGA) resolution. The front panel which adopts flush design and complies with IP66 standard makes it the perfect fit in industrial applications.

The IPPC 1040P supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, IPPC 1040P can gain a strong foothold in industrial field and machine devices. In addition, IPPC 1040P can hook 2nd display via a VGA port for dual independent display. IPPC 1040P has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 10.1", 16:9
- Resolution: WXGA 1280 x 800
- Luminance: 300cd/m2
- Contrast ratio: 1300:1
- LCD color: 262K
- Viewing angle: 85 (U), 85 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 90%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

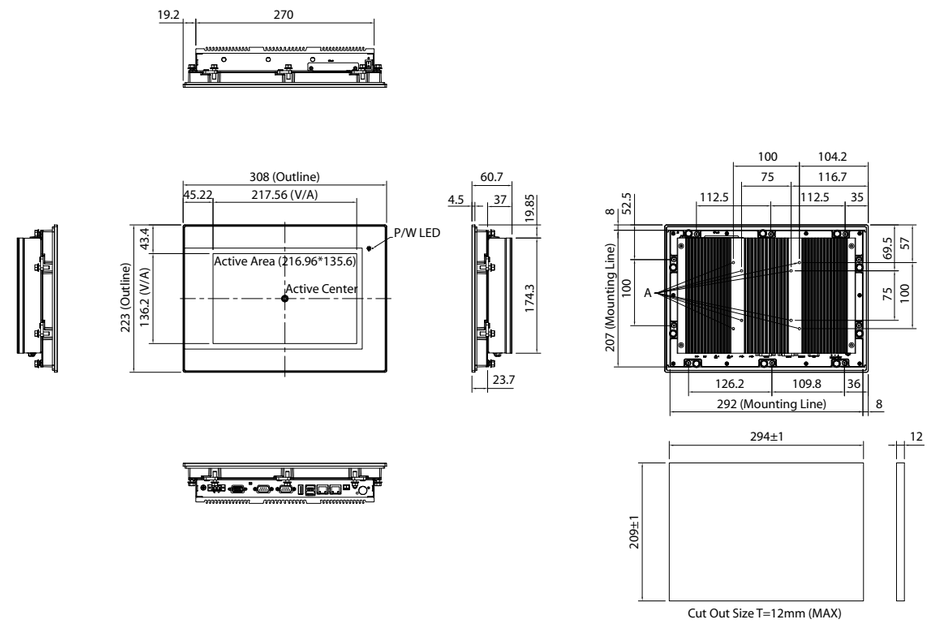
System

- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz, 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/ W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)
- Front LED indicator to show operating status

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- 2-pin remote power on/off switch
- Power switch
- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Dimension Drawing



Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out audio jack

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 based-Tx Ethernet compatible

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power:
  - Power input: 12~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature/humidity:
  - Operating temperature: -10°C to 60°C
  - Storage temperature: -20°C to 75°C
  - Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 308 x 223 x 60.7mm
- Weight: 3.7 kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC class A

OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 64-bit

Ordering Information

Barebone

- **IPPC 1040P (P/N: 10II1040P04X0)**
  10.1" WXGA LED backlight touch panel PC, Intel® Celeron® quad core processor J1900, up to 2.42GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

IPPC 1560TE

15" TFT XGA 4:3 Heavy Industrial Panel PC with
3rd Generation Intel® Core™ i5, 2.7GHz

Main Features

- 4:3 15" XGA fanless panel computer
- Powerful 2nd/3rd generation Intel® Core™ processor
- Two expansion slots for add-on PCI or/and PCIe cards
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Metal housing with robust aluminum front bezel for harsh environment
- IP65 compliant front panel
- Two FBI Windows
- For class I, division 2 hazardous locations

Product Overview

IPPC 1560TE is a heavy industrial panel PC equipped with powerful 2nd/3rd generation Intel® Core™ processor, TFT LCD panel with LED backlight and user-friendly touch screen. It provides two expansion slots to support PROFINET, PROFIBUS, DeviceNet, EtherNet/IP and EtherCAT protocols. The NEMA4/IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC 1560TE is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD Size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 400cd/m²
- Contrast ratio: 700
- LCD color: 16.7M
- Viewing angle: 60 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: support 2nd/3rd gen. Intel® Core™ processor family, rPGA 988
  - Intel® Core™ i5-3610ME, Dual Core, 2.7GHz, 3M Cache (maximum frequency 3.3GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System chipset: Intel® HM76 express chipset
- System memory: 1 x 204-pin DDR3 SO-DIMM socket, 4G DDR3 (default), support up to 8GB DDR3-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion:
  2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module)
  2 x expansion slots for add-on PCI or/and PCIe cards
  - 1 x PCI and 1 x PCIe x4 slots (default)
  - 2 x PCIe x4 slots
  - 2 x PCI slots

Rear I/O

- 2nd display VGA port: 1 x DB15
- Ethernet: 2 x RJ45
- USB: 4 x USB 2.0 (hidden)
- COM #1: RS232/422/485 w/ 2.5kv isolated protection
- COM #2: RS232/422/485 w/ 2.5kv isolated protection
- COM #3: RS232 w/ RI or 5V or 12V selection
- ATX power switch
- Reset button

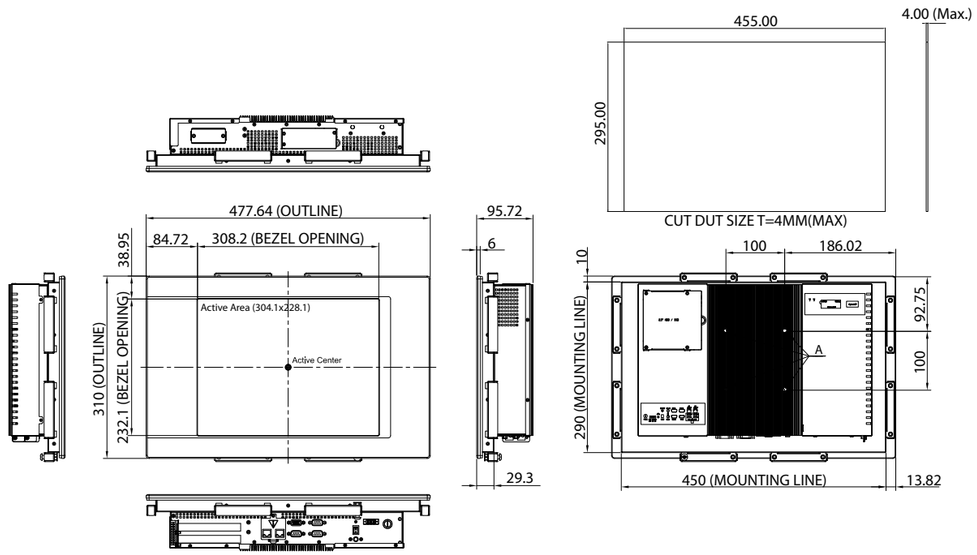
Ethernet

- LAN chip: dual Intel® 82574L Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Dimension Drawing



Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- Enclosure: aluminum front bezel with SPPC nickel plated housing
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
  - Power input: 24 VDC, 4A, Class 2
  - Power protection: ±20% with 1.5kv isolated protection
  - Fuse: 250V/10A
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G @ wall mount, half sine, 11ms
- Temperature:
  - Operating temperature: -10°C to 50°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 477.64 x 310 x 95.72mm
- Weight: 9.51 kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC Class A
- UL508
- C1D2: USL-ANSI/ISA 12.12.01-2013
  CNL-CSA C22.2 No. 213-M1987

OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0
- Windows XP 32-bit

Ordering Information

System

- **IPPC 1560TE (P/N: 10II1560T02X0)**
  15" XGA LED backlight fanless touch panel PC, Intel® Core™ i5-3610ME 2.7GHz, touch screen, 4GB DDR3, 3 x COM, isolated protection DC power

Optional

- **24V/5A, 120W AC to DC DIN rail power adapter w/o power cord (P/N: 7440120001X00)**
- **Riser card 2 x PCI slots (P/N: 20JK036P200X0)**
- **Riser card 2 x PCIe x4 slots (P/N: 20JK036E200X2)**

IPPC 1640P

15.6" TFT WXGA 16:9 Heavy Industrial Panel PC
with Intel® Celeron® Quad Core Processor J1900, up to 2.42GHz,
Multi-Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- Intel® Celeron® quad core processor J1900, up to 2.42GHz, 2M L2 cache
- Metal housing with robust aluminum front zero bezel for harsh environment
- 10 points P-Cap multi-touch with zero bezel flush front design
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP66 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

The 15.6" fanless panel PC IPPC 1640P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1366 x 768 (HD; WXGA) resolution. The front panel which adopts flush design and complies with IP66 standard makes it the perfect fit in industrial applications.

The IPPC 1640P supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, IPPC 1640P can gain a strong foothold in industrial field and machine devices. In addition, IPPC 1640P can hook 2nd display via a VGA port for dual independent display. IPPC 1640P has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 15.6", 16:9
- Resolution: WXGA 1366 x 768
- Luminance: 400cd/m2
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

System

- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz, 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/ W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)
- Front LED indicator to show operating status

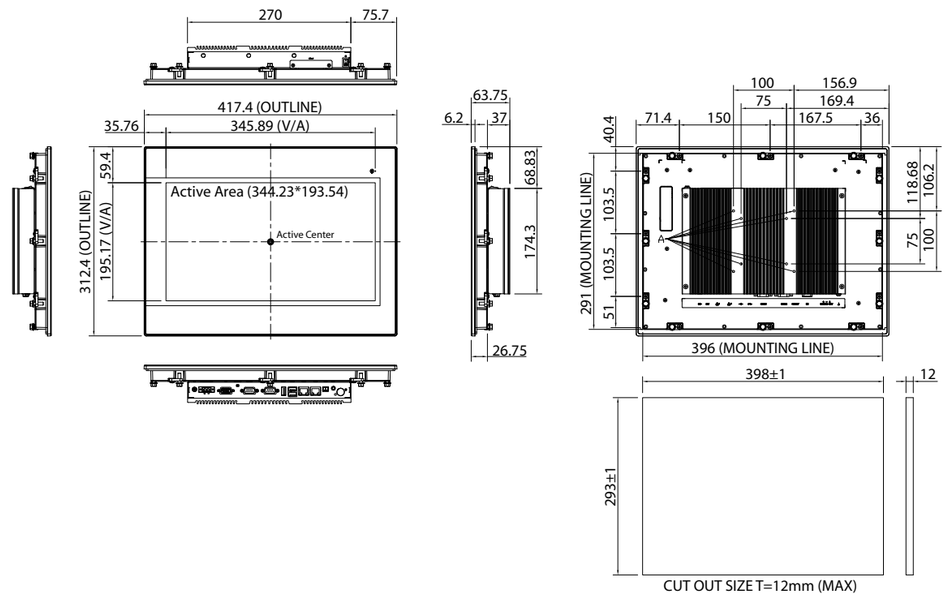
Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- 2-pin remote power on/off switch
- Power switch
- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out audio jack

Dimension Drawing



Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 based-Tx Ethernet compatible

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power:
  - Power input: 12~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature:
  - Operating temperature: -10°C to 60°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 417.4 x 312.4 x 63.75mm
- Weight: 6.4 kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC class A

OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 64-bit

Ordering Information

Barebone

- **IPPC 1640P-B (P/N: 10II1640P09X0)**
  15.6" WXGA LED backlight touch panel PC, Intel® Celeron® quad core processor J1900, up to 2.42GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

IPPC 1670P

15.6" TFT WXGA 16:9 Heavy Industrial Panel PC

4th Generation Intel® Core™ i Processor

Main Features

- 16:9 WXGA, 1366 x 768 fanless panel computer
- Powerful 4th generation Intel® Core™ i processor
- Optional two expansion slots for add-on PCI or/and PCIe cards
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Inside USB 2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Two FBI Windows

Product Overview

IPPC 1670P is a heavy industrial panel PC to support powerful 4th generation Intel® Core™ i processor, TFT LCD panel with LED backlight and userfriendly touch screen. It provides two expansion slots to support PROFINET, PROFIBUS, DeviceNet, EtherNet/IP and EtherCAT protocols. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC 1670P is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD size: 15.6", 16:9
- Resolution: WXGA, 1366 x 768
- Luminance: 400cd/m²
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch (for IPPC 1670P Series)

- Ten points P-Cap (projected capacitive touch)
- Light transmission: 87%
- Interface: USB
- Anti-scratch surface: >= 7H hardness

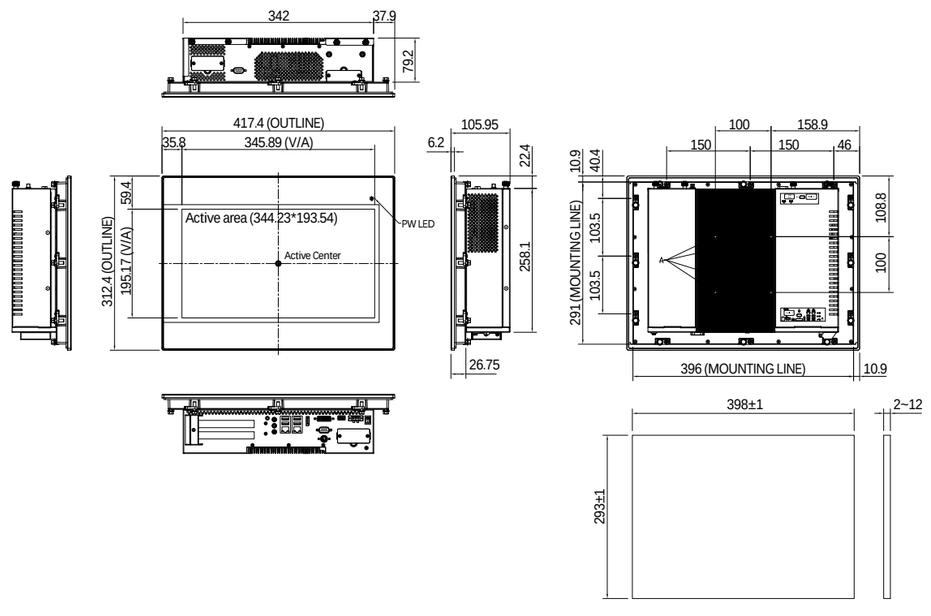
System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
  - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency3.3GHz if turbo boost enabled)
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
  - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
  - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
  - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/ NVRAM/mSATA storage)
  - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
    1 x PCI and 1 x PCIe x4 slots
    2 x PCIe x4 slots
    2 x PCI slots
    1 x PCIe x16 slot

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mlic-in
- USB: 4 x USB3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Dimension Drawing



Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210-IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
  - Power input: 12~30 VDC
  - Power connector: 3-pin PHOENIX connector
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature:
  - -10°C to 50°C
  - Storage temperature: -20°C to 75°C
  - Operating humidity: 10%~90% relative humidity, non-condensing

Dimension

- 417.4 x 312.4 x 105.95mm
- Weight: (barebone): 8.8 kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4), FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 32-bit and 64-bit

Ordering Information

System

- **IPPC 1670P-B (P/N: 10II1670P02X0)**
  15.6" WXGA LED backlight fanless P-CAP touch panel PC, 2 x COM, DC power input

Options

- **24V, 120W AC/DC power adapter w/o power cord (P/N: 7400120023X00)**
- **NISK37P1E1, one PCI slot and one PCIe x4 slot riser card (P/N: 10JK037P100X0)**
- **NISK37P2, two PCI slots (P/N: 10JK037P200X0)**
- **NISK37E2, two PCIe x4 slot (P/N: 10JK037E200X0)**
- **NISK37E16, one PCIe x16 slot (P/N: 10JK037E101X0)**

IPPC 2140P

21.5" Full HD 16:9 Heavy Industrial Panel PC
with Intel® Celeron® quad core processor J1900, up to 2.42GHz,
Multi-Touch Screen, 8GB DDR3L, 3 x USB, 2 x COM

Main Features

- Intel® Celeron® quad core processor J1900, up to 2.42GHz, 2M L2 Cache
- Metal housing with robust aluminum front zero bezel for harsh environment
- 10 points P-Cap multi-touch with zero bezel flush front design
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 8GB/2.5" HDD bracket
- IP66 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

The 21.5" fanless panel PC IPPC 2140P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1920 x 1080 (Full HD) resolution. The front panel which adopts flush design and complies with IP66 standard makes it the perfect fit in industrial applications.

The IPPC 2140P supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, IPPC2140P can gain a strong foothold in industrial field and machine devices. In addition, IPPC 2140P can hook 2nd display via a VGA port for dual independent display. IPPC 2140P has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 21.5", 16:9
- Resolution: Full HD 1920x1080
- Luminance: 300cd/m2
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED

Touch

- Ten points P-Cap (Projected Capacitive Touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

System

- CPU: onboard Intel® Celeron® Quad Core processor J1900, 2.0GHz, 2M L2 Cache (maximum frequency 2.42GHz if turbo boost enabled)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x external locked CFast socket
  - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)
- Front LED Indicator to show operating status

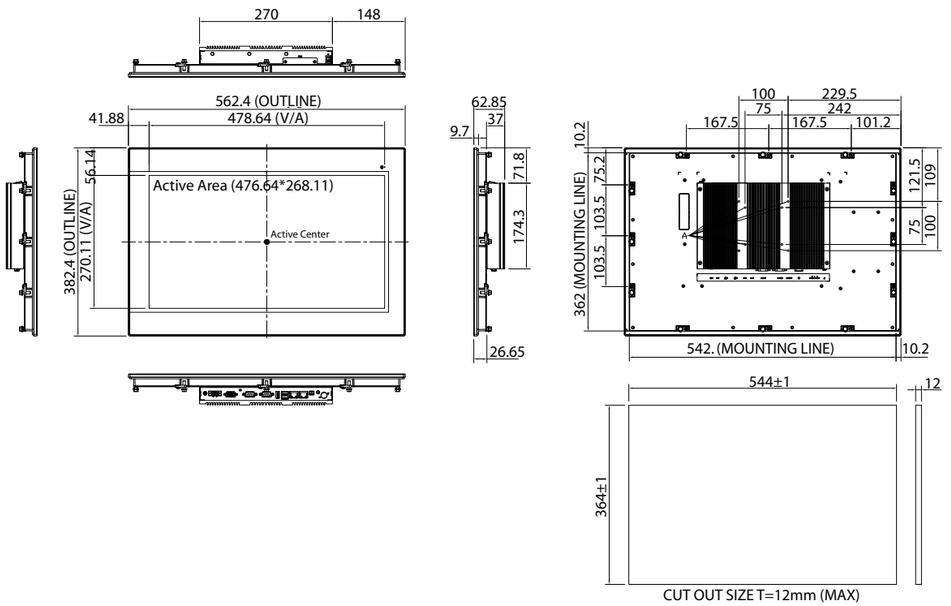
Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line out
- USB: 2 x USB 2.0, 1 x USB 3.0
- 2-pin remote power on/ off switch
- Power switch
- Reset button
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out audio jack

Dimension Drawing



Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment

- Color: Pantone 432C/RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power:
  - Power input: 12~30VDC
  - Power adapter: Optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature:
  - Operating temperature: -10°C to 60°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 562.4x382.4x62.85mm
- Weight: 9.26 kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC Class A

OS Support Lists

- Windows 7 32-bit/64-bit
- Windows 10 64-bit

Ordering Information

Barebone

- **IPPC 2140P-B (P/N: 10II2140P07X0)**
  21.5" full HD LED backlight touch panel PC, Intel® Celeron® quad core processor J1900, up to 2.42GHz, 2M L2 Cache, touch screen, 8GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

IPPC 2170P

21.5" TFT Full HD 16:9 Heavy Industrial Panel PC

4th Generation Intel® Core™ i Processor

Main Features

- 16:9 Full HD, 1920 x 1080 fanless panel computer
- Powerful 4th generation Intel® Core™ i processor
- Optional two expansion slots for add-on PCI or/and PCIe cards
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Inside USB 2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Two FBI Windows

Product Overview

IPPC 2170P is a heavy industrial panel PC to support powerful 4th generation Intel® Core™ i processor, TFT LCD panel with LED backlight and userfriendly touch screen. It provides two expansion slots to support PROFINET, PROFIBUS, DeviceNet, EtherNet/IP and EtherCAT protocols. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC 2170P is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD size: 21.5", 16:9
- Resolution: Full HD, 1920 x 1080
- Luminance: 300cd/m²
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89(U), 89(D), 89(L), 89(R)
- Backlight: LED

Touch (for IPPC 2170P Series)

- Ten points P-Cap (projected capacitive touch)
- Light transmission: 87%
- Interface: USB
- Anti-scratch surface: >= 7H hardness

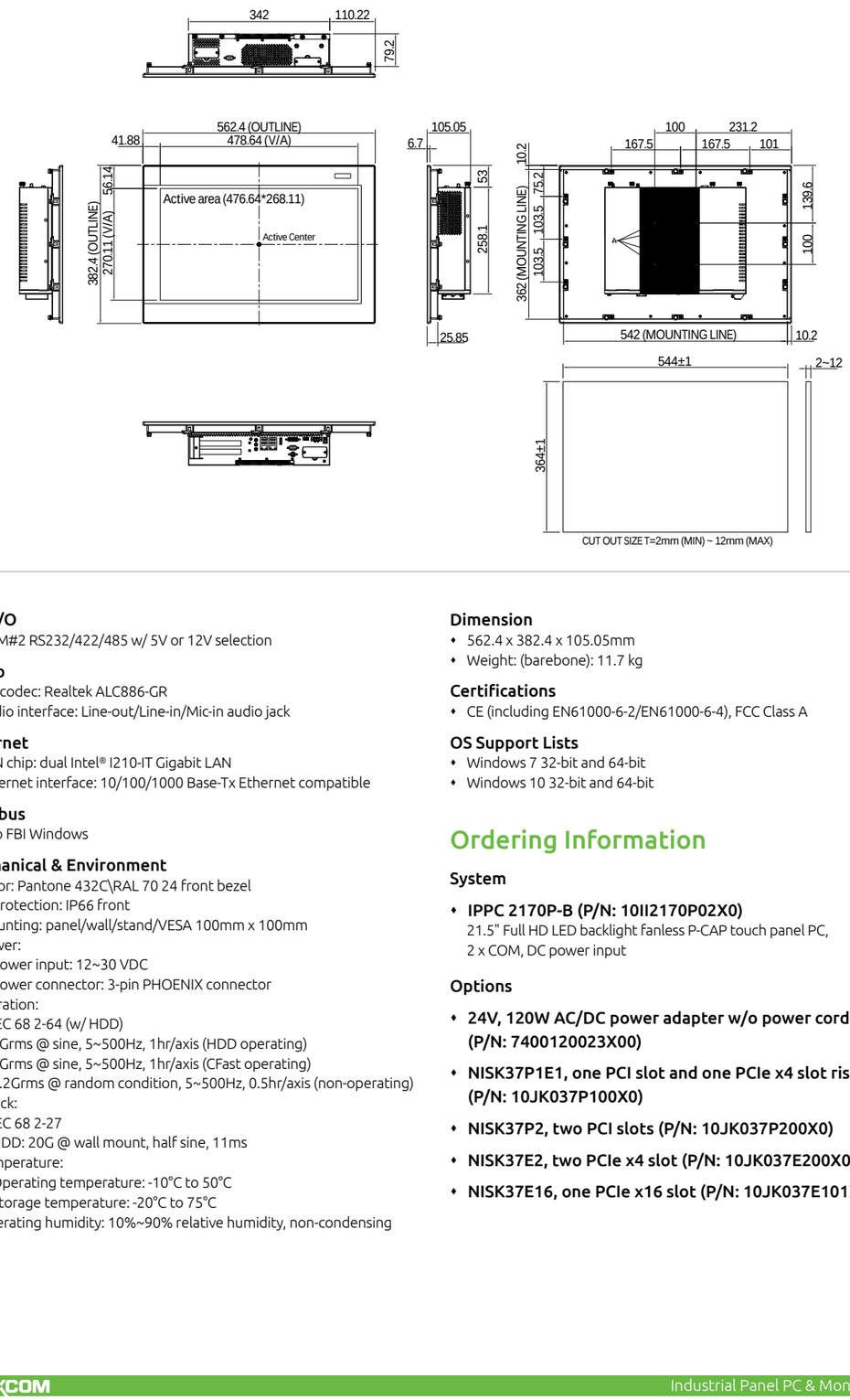
System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
  - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency3.3GHz if turbo boost enabled)
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
  - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
  - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
  - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/ NVRAM/mSATA storage)
  - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
    1 x PCI and 1 x PCIe x4 slots
    2 x PCIe x4 slots
    2 x PCI slots
    1 x PCIe x16 slot

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x MIic-in
- USB: 4 x USB3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Dimension Drawing



Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210-IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
  - Power input: 12~30 VDC
  - Power connector: 3-pin PHOENIX connector
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G @ wall mount, half sine, 11ms
- Temperature:
  - Operating temperature: -10°C to 50°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing

Dimension

- 562.4 x 382.4 x 105.05mm
- Weight: (barebone): 11.7 kg

Certifications

- CE (including EN61000-6-2/EN61000-6-4), FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 32-bit and 64-bit

Ordering Information

System

- **IPPC 2170P-B (P/N: 10II2170P02X0)**
  21.5" Full HD LED backlight fanless P-CAP touch panel PC, 2 x COM, DC power input

Options

- **24V, 120W AC/DC power adapter w/o power cord (P/N: 7400120023X00)**
- **NISK37P1E1, one PCI slot and one PCIe x4 slot riser card (P/N: 10JK037P100X0)**
- **NISK37P2, two PCI slots (P/N: 10JK037P200X0)**
- **NISK37E2, two PCIe x4 slot (P/N: 10JK037E200X0)**
- **NISK37E16, one PCIe x16 slot (P/N: 10JK037E101X0)**

IPPC A1570T-B

15" TFT XGA 4:3 Heavy Industrial Panel PC
4th Generation Intel® Core™ i Processor

Main Features

- 4:3 15" XGA fanless panel computer
- Powerful 4th generation Intel® Core™ i processor
- Optional two expansion slots for add-on PCI or/and PCIe card
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Front accessible USB 2.0 for easy of field maintenance
- Inside USB 2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Two FBI Windows
- Wide range 12~30VDC power input

Product Overview

IPPC A1570 series is a heavy industrial panel PC to support powerful 4th generation Intel® Core™ i processor, TFT LCD panel with LED backlight and user-friendly touch screen. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC A1570 series is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD Size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 450cd/m²
- Contrast ratio: 800
- LCD color: 16.2M
- Viewing angle: 70 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

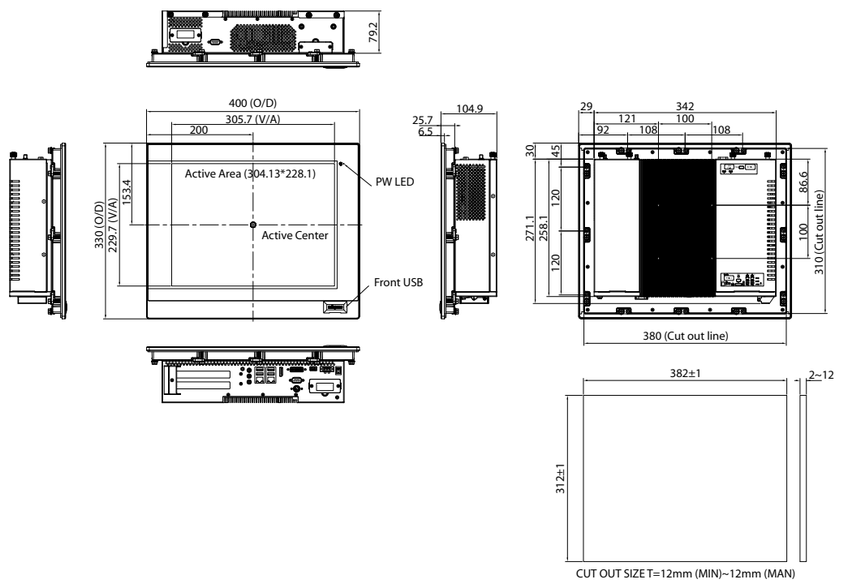
System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
  - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
  - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/ DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
  - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
  - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/ NVRAM/mSATA storage)
  - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
    1 x PCI and 1 x PCIe x4 slots
    2 x PCIe x4 slots
    2 x PCI slots
    1 x PCIe x16 slot
- 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB 3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Dimension Drawing



Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210-IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
  - Power input: 12~30 VDC
  - Power connector: 3-pin PHOENIX connector
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature
  - Resistive: -20°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for IPPC A1570T series, limits to be at 90% RH at max 50°C)
- Dimension: 400 x 330 x 104.9 mm
- Weight: 8.3 kg (barebone)

Certifications

- CE (including EN61000-6-2/EN61000-6-4), FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 64-bit

Ordering Information

System

- **IPPC A1570T-B (P/N:10II1570T02X0)**
  15" XGA LED backlight fanless RTP touch panel PC, 2 x COM, DC power input

Optional

- **24V, 120W AC/DC power adapter w/o power cord (P/N: 7400120023X00)**
- **NISK37P1E1, one PCI slot and one PCIe x4 slot riser card (P/N: 10JK037P100X0)**
- **NISK37P2, two PCI slots (P/N: 10JK037P200X0)**
- **NISK37E2, two PCIe x4 slot (P/N: 10JK037E200X0)**
- **NISK37E16, one PCIe x16 slot (P/N: 10JK037E101X0)**

IPPC A1770T

17" TFT SXGA 4:3 Heavy Industrial Panel PC
4th Generation Intel® Core™ i Processor

Main Features

- 4:3 17" SXGA fanless panel computer
- Powerful 4th generation Intel® Core™ i processor
- Optional two expansion slots for add-on PCI or/and PCIe card
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Front accessible USB 2.0 for easy of field maintenance
- Inside USB 2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Two FBI Windows

Product Overview

IPPC A1770 series is a heavy industrial panel PC to support powerful 4th generation Intel® Core™ i processor, TFT LCD panel with LED backlight and user-friendly touch screen. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC A1770 series is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

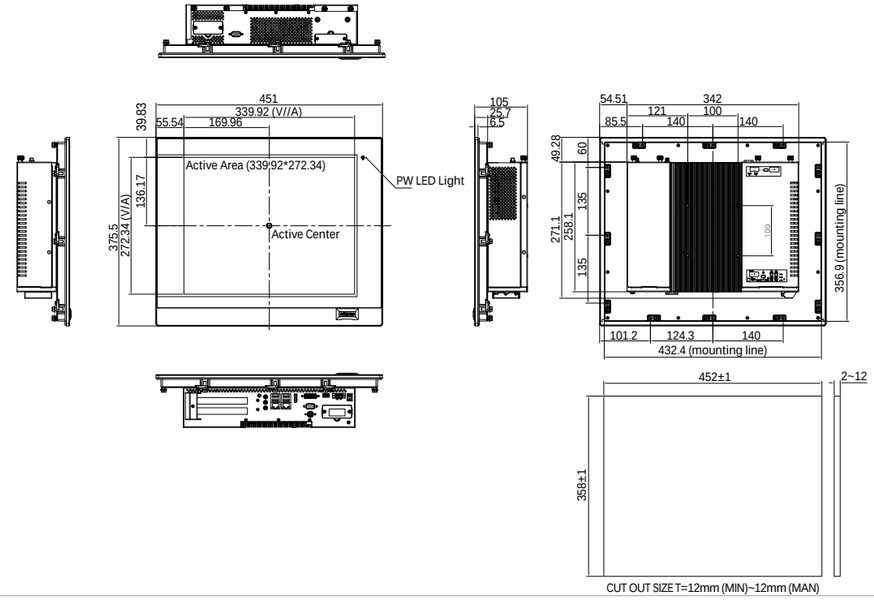
System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
  - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
  - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
  - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
  - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/ NVRAM/mSATA storage)
  - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
    1 x PCI and 1 x PCIe x4 slots
    2 x PCIe x4 slots
    2 x PCI slots
    1 x PCIe x16 slot
- 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Dimension Drawing



Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210-IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
  - Power input: 12~30 VDC
  - Power connector: 3-pin Phoenix connector
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature:
  - Resistive: -10°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for IPPC A1770T series, limits to be at 90% RH at max 50°C)
- Dimension: 451 x 375.5 x 105mm
- Weight: 9.5 kg (barebone)

Certifications

- CE (including EN61000-6-2/EN61000-6-4), FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 64-bit

Ordering Information

System

- **IPPC A1770T-B (P/N: 10II1770T07X0)**
  17" SXGA LED backlight fanless RTP touch panel PC, 2 x COM, DC power input

Optional

- **24V, 120W AC/DC power adapter w/o power cord (P/N: 7400120023X00)**
- **NISK37P1E1, one PCI slot and one PCIe x4 slot riser card (P/N: 10JK037P100X0)**
- **NISK37P2, two PCI slots (P/N: 10JK037P200X0)**
- **NISK37E2, two PCIe x4 slot (P/N: 10JK037E200X0)**
- **NISK37E16, one PCIe x16 slot (P/N: 10JK037E101X0)**

IPPC A1970T

19" TFT SXGA 4:3 Heavy Industrial Panel PC
4th Generation Intel® Core™ i Processor

Main Features

- 4:3 19" SXGA fanless panel computer
- Powerful 4th generation Intel® Core™ i processor
- Optional two expansion slots for add-on PCI or/and PCIe card
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Front accessible USB 2.0 for easy of field maintenance
- Inside USB 2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Two FBI Windows
- Wide range 12~30VDC power input

Product Overview

IPPC A1970 series is a heavy industrial panel PC to support powerful 4th generation Intel® Core™ i processor, TFT LCD panel with LED backlight and user-friendly touch screen. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC A1970 series is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 80±3%
- Interface: USB

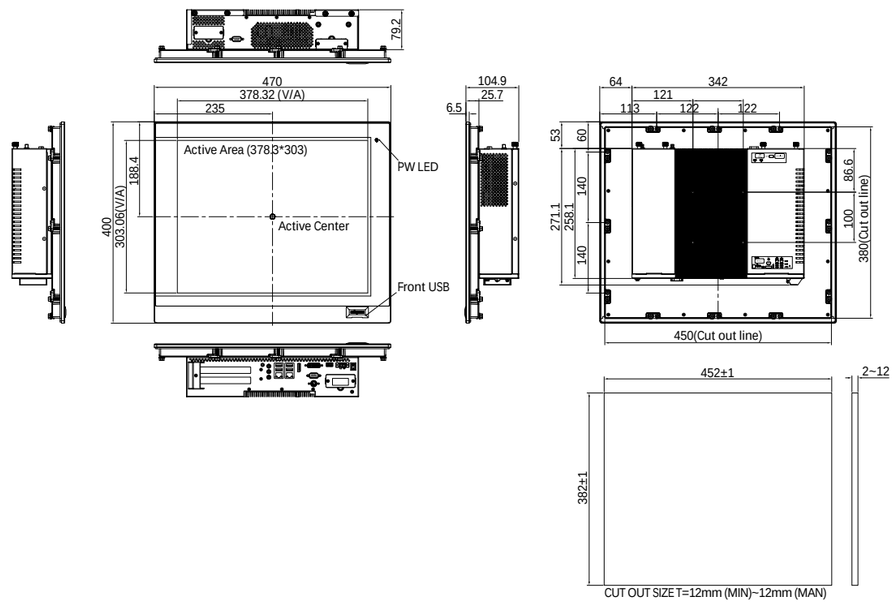
System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
  - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
  - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/ DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
  - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
  - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/ NVRAM/mSATA storage)
  - 2 x Expansion slots for add-on PCI or/and PCIe cards (optional)
    1 x PCI and 1 x PCIe x4 slots
    2 x PCIe x4 slots
    2 x PCI slots
    1 x PCIe x16 slot
- 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB 3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

Dimension Drawing



Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Ethernet

- LAN chip: dual Intel® I210-IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Fieldbus

- Two FBI Windows

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
  - Power input: 12~30 VDC
  - Power connector: 3-pin PHOENIX connector
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature:
  - Resistive: -10°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for IPPC A1970T series, limits to be at 90% RH at max 50°C)
- Dimension: 470 x 400 x 104.9 mm
- Weight: 10.25 kg (barebone)

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 64-bit

Ordering Information

System

- **IPPC A1970T-B (P/N: 10II0197001X0)**
  19" SXGA LED backlight fanless RTP touch panel PC, 2 x COM, DC power input

Optional

- **24V, 120W AC/DC power adapter w/o power cord (P/N: 7400120023X00)**
- **NISK37P1E1, one PCI slot and one PCIe x4 slot riser card (P/N: 10JK037P100X0)**
- **NISK37P2, two PCI slots (P/N: 10JK037P200X0)**
- **NISK37E2, two PCIe x4 slot (P/N: 10JK037E200X0)**
- **NISK37E16, one PCIe x16 slot (P/N: 10JK037E101X0)**

IPPC A1970T-JL

19" TFT SXGA 4:3 Heavy Industrial Panel PC
4th Generation Intel® Core™ i Processor

Main Features

- 4:3 19" SXGA fanless panel computer
- Powerful 4th generation Intel® Core™ i processor
- Optional 3.5G/Wi-Fi module/2.5" HDD
- Front accessible USB 2.0 for easy of field maintenance
- Inside USB 2.0 type A connector for license key
- Metal housing with robust aluminum IP66 compliant front bezel for harsh environment
- Wide range 12~30VDC power input

Product Overview

IPPC A1970 series is a heavy industrial panel PC to support powerful 4th generation Intel® Core™ i processor, TFT LCD panel with LED backlight and user-friendly touch screen. The IP66 rated heavy-duty aluminum front bezel and the vibration-resistant rugged chassis are specifically designed for outdoor and harsh industrial environments. IPPC A1970 series is ideal for use in oil and gas rig, wind farms, chemical factories, pharmaceutical factories, and hazardous working area.

Specifications

Panel

- LCD size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- 5-wire resistive (flush panel type)
- Light transmission: 80±3%
- Interface: USB

System

- CPU (optional): support 4th gen. Intel® Core™ i processor family, LGA1150 socket type
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache (maximum frequency 3.0GHz if turbo boost enabled)
  - Core™ i5-4570TE, Dual Core, 2.7GHz, 4M Cache (maximum frequency 3.3GHz if turbo boost enabled)
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache (no turbo boost)
  - Core™ i3-4340TE, Dual, Core, 2.6GHz, 4M Cache (no turbo boost)
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache (no turbo boost)
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache (no turbo boost)
- BIOS: AMI BIOS
- System chipset: Intel® Q87 PCH
- System memory (optional): 2 x 204-pin DDR3/DDR3L SO-DIMM socket, support up to 16GB DDR3/ DDR3L 1333/1600, non-ECC and unbuffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x mini-PCIe w/o SIM card holder slot to support mSATA storage
  - 1 x Hard drive bay: support 1 x 2.5" SATA HDD/SSD (optional)
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature and voltage
- Expansion:
  - 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module/ NVRAM/mSATA storage)
- 1 x Front accessible USB 2.0

Rear I/O

- 1 x PS2 for keyboard/mouse
- Ethernet: 2 x RJ45
- 2nd/3rd display: additional independent DisplayPort: 1 x DVI-I (DVI-D + DVI-A) and 1 x DisplayPort
- Audio port: 1 x Line-out; 1 x Line-in; 1 x Mic-in
- USB: 4 x USB 3.0
- 3-pin remote power on/off switch connector
- Reset button
- COM#1: RS232/422/485 w/ 5V or 12V selection
- ATX power switch

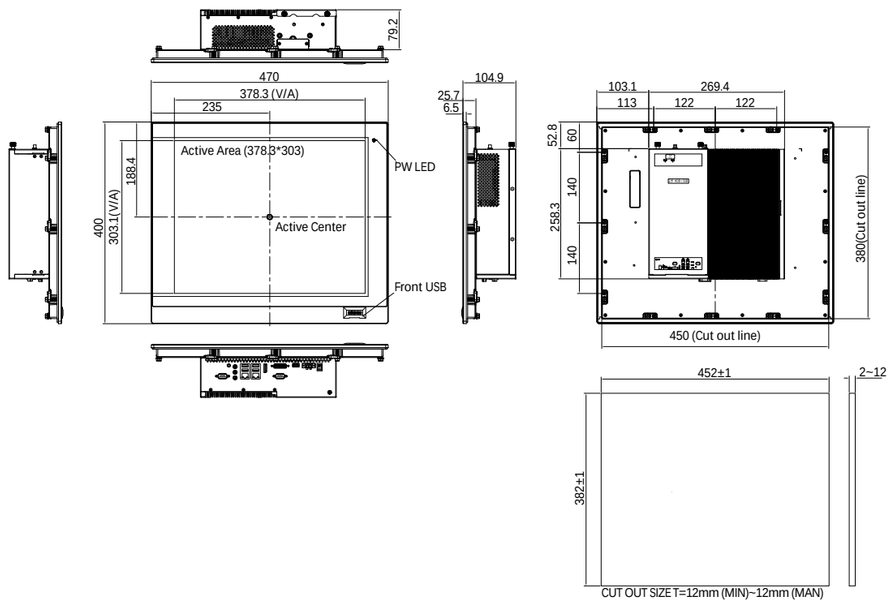
Top I/O

- COM#2 RS232/422/485 w/ 5V or 12V selection

Audio

- HD codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in/Mic-in audio jack

Dimension Drawing



Ethernet

- LAN chip: dual Intel® I210-IT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power:
  - Power input: 12~30 VDC
  - Power connector: 3-pin PHOENIX connector
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G @ wall mount, half sine, 11ms
- Operating temperature:
  - Resistive: -10°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing (for IPPC A1970T series, limits to be at 90% RH at max 50°C)
- Dimension: 470 x 400 x 104.9 mm
- Weight: 10.1 kg (barebone)

Certifications

- CE (including EN61000-6-2/EN61000-6-4)
- FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 64-bit

Ordering Information

System

- **IPPC A1970T-JL (P/N: 10II0197002X2)**
  19" SXGA LED backlight fanless RTP touch panel PC, 2 x COM, DC power input

Optional

- **24V, 120W AC/DC power adapter w/o power cord (P/N: 7400120023X00)**

IPPD 1600P

15.6” IP66 Heavy Industrial 16:9 WXGA Zero Bezel Flush Touch Monitor

Main Features

- IP66 compliant and metal housing with robust aluminum front zero bezel for harsh environment
- 10 points P-Cap multi-touch with zero bezel flush front design
- 3 display input interface: analog VGA/DVI-D/DisplayPort
- Shares identical appearance with IPPC series
- Ultra slim in depth
- OSD multi-language function
- All connectors with lock
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~24VDC

Product Overview

15.6” 16:9 LCD display IPPD 1600P is based on a ten points P-Cap multi-touch screen with resolution up to 1366 x 768 Panel. IPPD 1600P has system grade grounding protection which means chassis grounding and power grounding design to avoid in-rush current damage monitor. IPPD 1600P is ideal for space-critical environments where systems and displays are kept apart. In addition, IPPD 1600P adopts zero bezel flush panel design and has IP66 front panel. IPPD 1600P provides prevailing video interface: VGA, DVI-D and DisplayPort, supporting both digital and analog signals. Moreover, IPPD1600P supports 12~24VDC power input and offers panel mount and VESA mount, allowing users to choose the mounting method that meets their situation. IPPD 1600P is the best solution for NEXCOM NISE fanless computer, NViS security surveillance series and APPC/IPPC panel PC when a second display is required.

Specifications

Panel

- LCD size: 15.6”, 16:9
- Resolution: WXGA 1366 x 768
- Luminance: 400cd/m2
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB

Rear I/O

- Touch interface port: USB with Lock
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-D connector)/DisplayPort
- DC power input connector: 3-pin PHOENIX terminal Blocks

OSD Function

- OSD keypad
- Multilanguage OSD

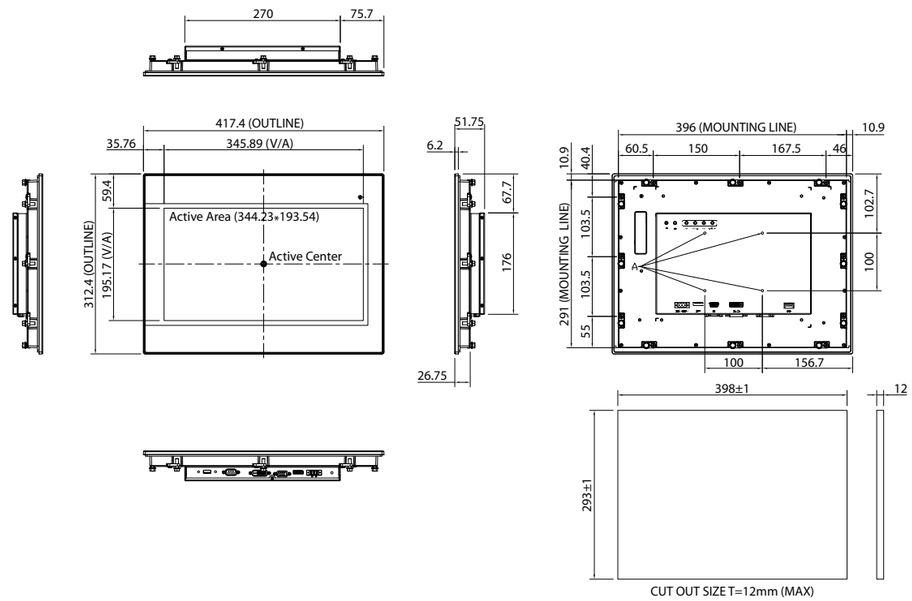
Mechanical & Environment

- Color: Pantone 432C/RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power:
  - Power input: 12~24VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64
  - 2Grms @ sine, 5~500Hz, 1hr/axis (operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature:
  - Operating temperature: -10°C to 60°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 417.4 x 312.4 x 51.75mm
- Weight: 5.48Kg

Certifications

- CE (including EN61000-6-1/EN61000-6-2/EN61000-6-3/EN61000-6-4)
- FCC Class B

Dimension Drawing



Ordering Information

Barebone

- **IPPD 1600P-B (P/N: 10IZ1600P01X0)**
  15.6" WXGA heavy industrial 16:9 LED backlight P-Cap touch monitor with VGA, DVI-D and DisplayPort input, 12~24VDC input

Option

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**
- **1.8m DVI-D male to DVI-D male cable (P/N: 603DVI0007X00)**
- **1.8m DisplayPort cable (P/N: 6030000122X00)**

IPPD 2100P

21.5” IP66 Heavy Industrial 16:9 WXGA Zero Bezel Flush Touch Monitor

Main Features

- IP66 compliant and metal housing with robust aluminum front zero bezel for harsh environment
- 10 points P-Cap multi-touch with zero bezel flush front design
- 3 display input interface: analog VGA/DVI-D/DisplayPort
- Shares identical appearance with IPPC series
- Ultra slim in depth
- OSD multi-language function
- All connectors with lock
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~24VDC

Product Overview

21.5” 16:9 LCD display IPPD 2100P is based on a ten points P-Cap multi-touch screen with resolution up to 1920 x 1080 (Full HD) Panel. IPPD 2100P has system grade grounding protection which means chassis grounding and power grounding design to avoid in-rush current damage monitor. IPPD 2100P is ideal for space-critical environments where systems and displays are kept apart. In addition, IPPD 2100P adopts zero bezel flush panel design and has IP66 front panel. IPPD 2100P provides prevailing video interface: VGA, DVI-D and DisplayPort, supporting both digital and analog signals. Moreover, IPPD 2100P supports 12~24VDC power input and offers panel mount and VESA mount, allowing users to choose the mounting method that meets their situation. IPPD 2100P is the best solution for NEXCOM NISE fanless computer, NViS security surveillance series and APPC/IPPC panel PC when a second display is required.

Specifications

Panel

- LCD size: 21.5”, 16:9
- Resolution: full HD 1920 x 1080
- Luminance: 300cd/m2
- Contrast ratio: 5000
- LCD color: 16.7M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Touch light transmission: 87%
- Anti-scratch surface: 7H hardness
- Touch interface: USB
- Windows 8 compliance

Rear I/O

- Touch interface port: USB with Lock
- Video port: VGA (1 x DB15)/DVI-D (1x DVI-D connector)/DisplayPort
- DC power input connector: 3-pin PHOENIX terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

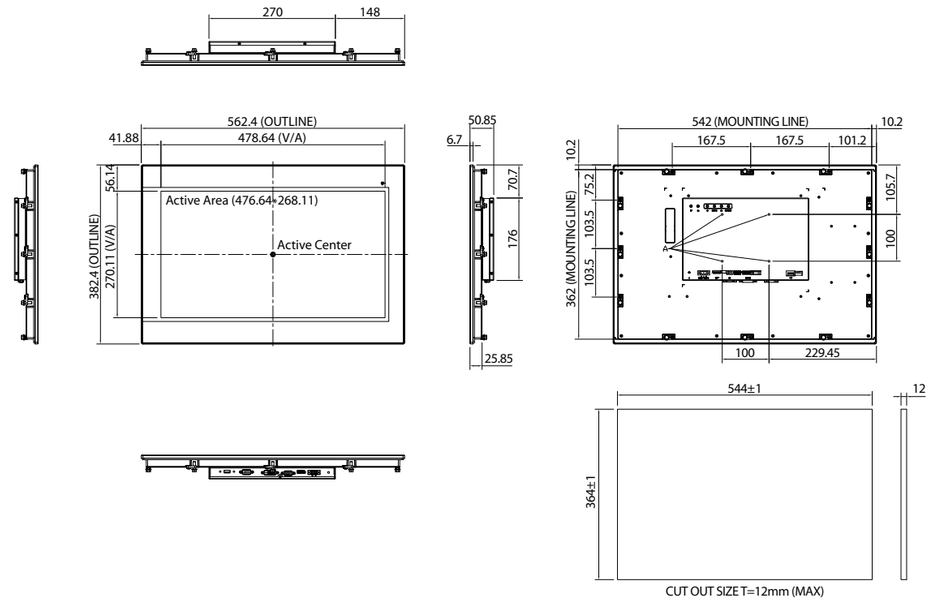
Mechanical & Environment

- Color: Pantone 432C\RAL 70 24 front bezel
- IP protection: IP66 front
- Mounting: panel/ wall/ stand/ VESA 100mm x 100mm
- System with panel mounting kit w/o panel mounting hole
- Power:
  - Power input: 12~24VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64
  - 2Grms @ sine, 5~500Hz, 1hr/axis (operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature:
  - Operating temperature: -10°C to 60°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 562.4 x 382.4 x 50.85mm
- Weight: 7.87Kg

Certifications

- CE (including EN61000-6-1/EN61000-6-2/EN61000-6-3/EN61000-6-4)
- FCC Class B

Dimension Drawing



Ordering Information

Barebone

- **IPPD 2100P-B (P/N: 10IZ2100P01X0)**
  21.5” full HD heavy industrial 16:9 LED backlight P-Cap touch monitor with VGA, DVI-D and DisplayPort input, 12~24VDC input

Option

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**
- **1.8m DVI-D male to DVI-D male cable (P/N: 603DVI0007X00)**
- **1.8m DisplayPort cable (P/N: 6030000122X00)**

APPC 0840T

8” TFT SVGA 4:3 Flush Panel PC with Intel® Atom™ E3826, 1.46GHz, Touch Screen, 2GB DDR3L, 4 x USB, 2 x COM and VGA

Main Features

- 4:3 8” SVGA fanless panel computer
- Intel® Atom™ E3826, Dual Core, low power consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/2x RS232/422/485/Line-out
- 3 x USB 2.0/1 x USB 3.0/1 x mini-PCIe socket/1 x CFast
- Remote power switch
- DDR3L 2GB/2.5” HDD bracket
- IP65 compliant front panel
- Support Fieldbus module
- Mounting support: panel/wall/stand/VESA 75mm x 75mm
- Wide range power input 12~30VDC

Product Overview

Incorporated a 8” 4:3 touch screen LCD panel with resolutions up to 800 x 600 (SVGA) and 400 nits brightness, the APPC 0840T are fanless Panel PC based on the Atom™ E3826 processor. The industrial motherboard is reengineering to have RAM and mini-PCIe aligned in the same side of the board with its Intel® Atom™ E3826 CPU. This dedicated motherboard benefits users both in future capability expansion and ease for maintenance. The Panel PC comes with flush panel design and can have IP65 front for industrial applications. The touch screen provides the durable, reliable, and scratchable benefits for easy maintenance in wide applications.

The ultra slim APPC 0840T makes it become industrial slimmest model for space-critical applications, such as, access control, small automation machineries, forklift and truck etc. This APPC 0840T supports fieldbus module, WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, one mini-PCIe slot and one SIM card holder. With support for wide power input of 12~30VDC, this APPC 0840T can gain a strong foothold in industrial field and machine devices. In addition, this APPC 0840T can hook 2nd display via a VGA port for dual independent display. 0840T has two RS232/422/485 ports, three USB 2.0 port, one USB 3.0 port and fieldbus port.

Specifications

Panel

- LCD size: 8”, 4:3
- Resolution: SVGA 800 x 600
- Luminance: 400cd/m2
- Contrast ratio: 500
- LCD color: 262K
- Viewing angle: 50(U), 70(D), 70(L), 70(R)
- Backlight: LED

Touch screen

- 5-wire resistive (flush panel type)
- Touch light transmission: 82%
- Touch interface: USB

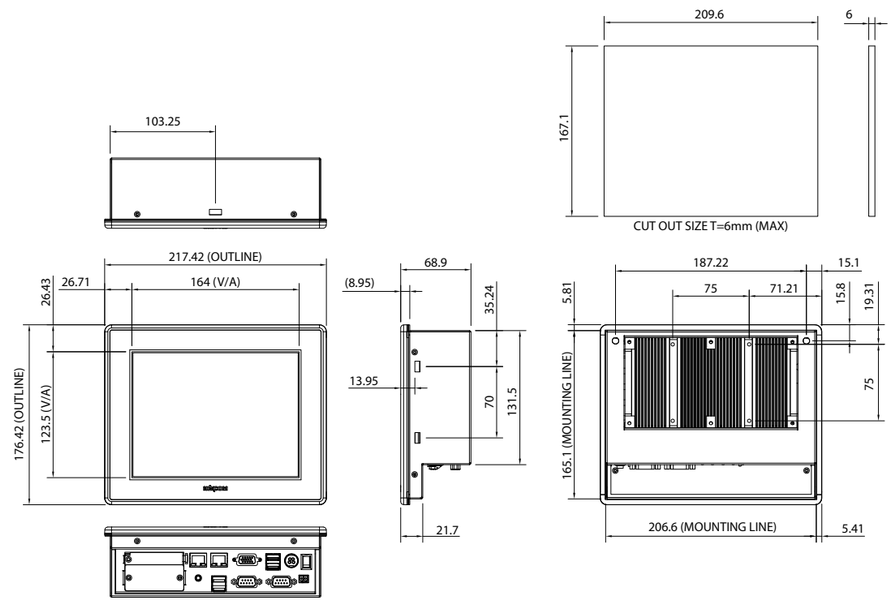
System

- CPU: on-board Intel® Atom™ dual core processor E3826, 1.46GHz, 1M L2 cache
- BIOS: AMI BIOS
- System memory: 1x 204-pin DDR3L SO-DIMM socket, 2GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x external locked CFast socket
  - 1 x hard drive bay: optional 1 x 2.5” SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 1 x mini-PCIe socket1 (support optional Wi-Fi, 3.5G module or fieldbus card)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 3 x USB 2.0; 1 x USB 3.0
- Power switch
- Remote power switch
- Reset button
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Fieldbus: (protocol interface optional)

Dimension Drawing



Model	Protocol	Connector
FBI90E-PNM	PROFINET Master	Dual RJ-45
FBI90E-EP	EtherNet/IP Master	
FBI90E-ECM	EtherCAT Master	
FBI90E-PBM	PROFIBUS Master	DB9
FBI90E-DNM	DeviceNet Master	5-pins Phoenix contact terminal

Audio

- HD codec: realtek ALC886-GR
- Audio interface: Line-out audio jack

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Mechanical & Environment

- Color: Pantone black
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 75mm x 75mm
- System with panel mounting kit w/o panel mounting hole
- Power
  - Power input: 12~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: -5°C to 50°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 217.4x176.4x68.9mm
- Weight: 2.3 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 0840T (P/N: 10IA0840T00X0)**
  8” SVGA LED backlight touch panel PC with Intel® Atom™ E3826 1.46 GHz, touch screen, 2GB DDR3L with 2x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060029X00)**
- **PROFINET, EtherNet/IP, EtherCAT, SERCOSIII master interface module: FBI 90E-REM (P/N: 10J50090E08X0)**
- **PROFINET master interface module: FBI 90E-PNM (P/N: 10J50090E21X0)**
- **PROFIBUS master interface module: FBI 90E-PBM (P/N: 10J50090E09X0)**
- **DeviceNet master interface module: FBI 90E-DNM (P/N: 10J50090E10X0)**
- **EtherCAT master interface module: FBI 90E-ECM (P/N: 10J50090E19X0)**

APPC 1240T

12.1" TFT SVGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- 4:3 12.1" SVGA fanless LED panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 12.1" fanless panel PC APPC 1240T incorporating an industrial motherboard is intended for versatile industrial applications. APPC 1240T has a touch screen LED backlight LCD panel with 800 x 600 (SVGA) resolution and 450-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

This APPC series supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, this APPC series can gain a strong foothold in industrial field and machine devices. In addition, this APPC series can hook 2nd display via a VGA port for dual independent display. APPC 1240T has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 12.1", 4:3
- Resolution: SVGA 800 x 600
- Luminance: 500cd/m²
- Contrast ratio: 700
- LCD color: 16.7M
- Viewing angle: 65 (U), 75 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.0GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

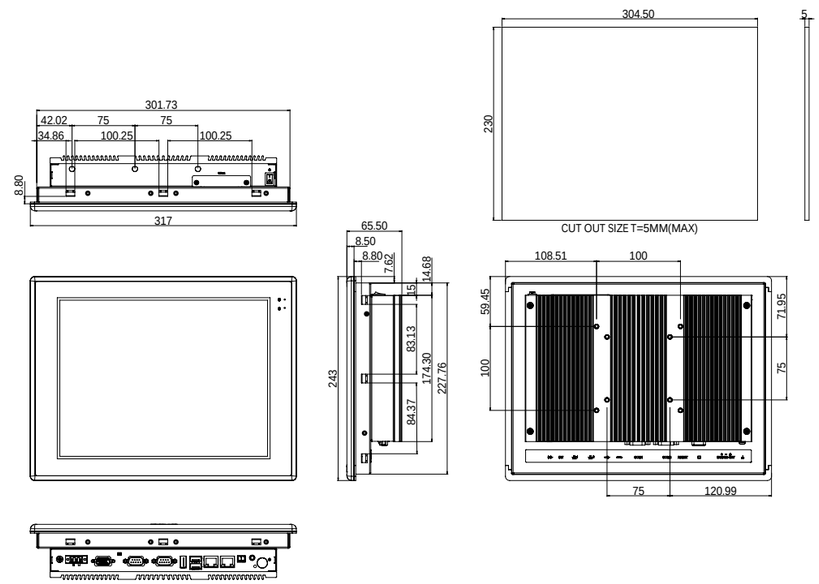
Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: -5°C~60°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 317 x 243 x 65.5 mm
- Weight: 3.6 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 1240T-B (P/N: 10IA1240T10X0)**
  12.1" SVGA LED backlight touch panel PC, Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 xRS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPC 1245T

12.1" TFT XGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- 4:3 12.1" XGA fanless LED panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 12.1" XGA fanless panel PC APPC 1245T incorporating an industrial motherboard is intended for versatile industrial applications. APPC 1245T supports 1024 x 768 (XGA) resolution and 500-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

This APPC series supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, this APPC series can gain a strong foothold in industrial field and machine devices. In addition, this APPC series can hook 2nd display via a VGA port for dual independent display. APPC 1245T has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 12.1", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 500cd/m^2
- Contrast ratio: 700
- LCD color: 16.7M
- Viewing angle: 70(U), 70(D), 80(L), 80(R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.0GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0 + 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485 w/ 2.5kv isolated
- COM #2: RS232/422/485 w/ 2.5kv isolated

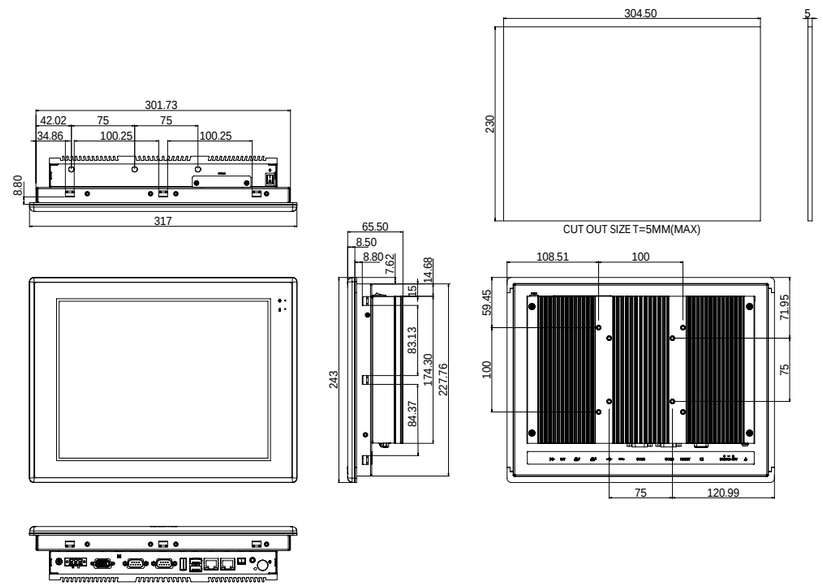
Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: -5°C~60°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 317 x 243 x 65.5 mm
- Weight: 3.6 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 1245T-B (P/N: 10IA1245T08X0)**
  12.1" XGA LED backlight touch panel PC, Intel® Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPC 1540T

15" TFT XGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- 4:3 15" XGA fanless LED panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 15" fanless panel PC APPC 1540T incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1024 x 768 (XGA) resolution and 400-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

The APPC 1540T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, APPC 1540T can gain a strong foothold in industrial field and machine devices. In addition, APPC 1540T can hook 2nd display via a VGA port for dual independent display. APPC 1540T has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 400cd/m²
- Contrast ratio: 2500
- LCD color: 16.7M
- Viewing angle: 88 (U), 88 (D), 88 (L), 88 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.0GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485 w/2.5kv isolated
- COM #2: RS232/422/485 w/2.5kv isolated

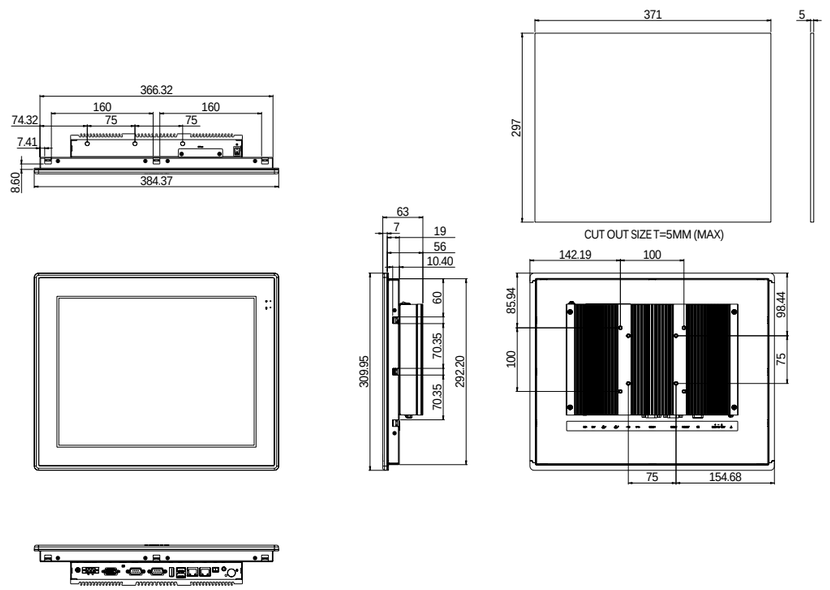
Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: -5°C~60°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 384.37 x 309.95 x 63 mm
- Weight: 4.7 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 1540T-C (P/N: 10IA1540T15X0)**
  15" XGA LED backlight touch panel PC, Intel® Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPC 1740T

17" TFT SXGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- 4:3 17" SXGA fanless panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 17" fanless panel PC APPC 1740T incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LCD panel with 1280 x 1024 (SXGA) resolution and 350-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

The APPC 1740T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, APPC 1740T can gain a strong foothold in industrial field and machine devices. In addition, APPC 1740T can hook 2nd display via a VGA port for dual independent display. APPC 1740T has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m²
- Contrast ratio: 800
- LCD color: 16.7M
- Viewing angle: 60 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.0GHz, 2M L2 Cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485 w/2.5kv isolated
- COM #2: RS232/422/485 w/2.5kv isolated

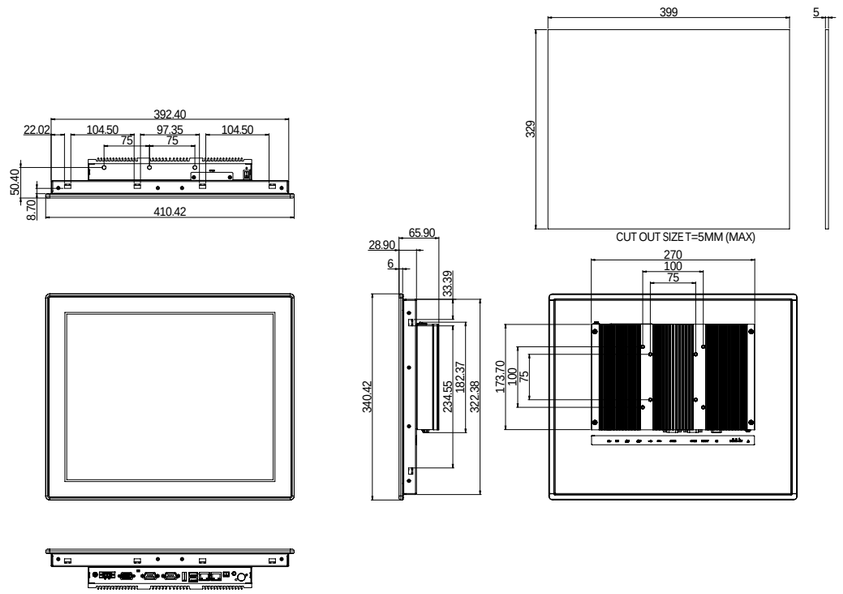
Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: -5°C to 60°C
  - Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 410.4 x 340.4 x 65.9 mm
- Weight: 5.6 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 1740T-B (P/N: 10IA1740T07X0)**
  17" SXGA LED backlight touch panel PC, Intel® Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPC 1940T

19" TFT SXGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- 4:3 19" SXGA fanless LED panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/1 x CFast/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 19" fanless panel PC APPC 1940T incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1280 x 1024 (SXGA) resolution. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

The APPC 1940T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder. With support for wide power input of 12~30VDC, APPC 1940T can gain a strong foothold in industrial field and machine devices. In addition, APPC 1940T can hook 2nd display via a VGA port for dual independent display. APPC 1940T has two isolated RS232/422/485 ports.

Specifications

Panel

- LCD size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m^2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch Screen

- 5-wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900 , up to 2.0GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485 w/2.5kv isolated
- COM #2: RS232/422/485 w/2.5kv isolated

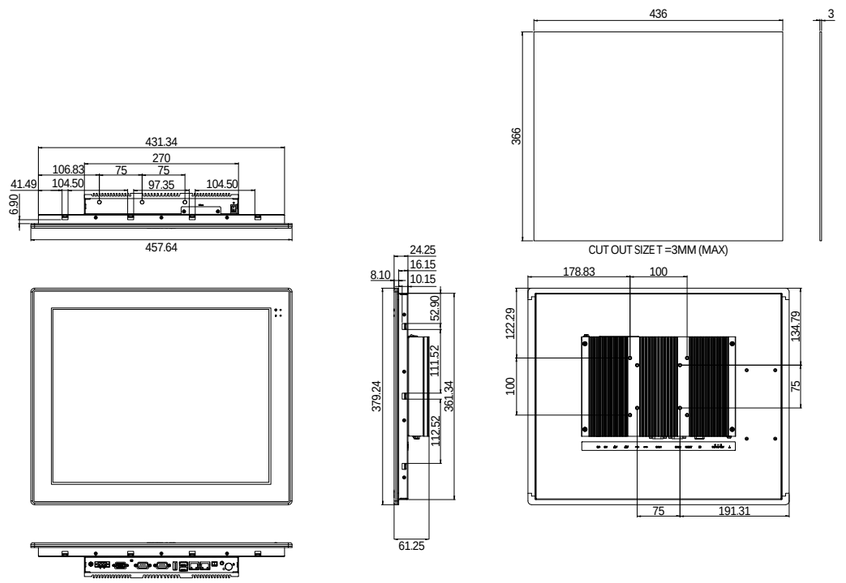
Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Color: Pantone black\RAL 15 00 front bezel w/ Pantone 400C\RAL 090 80 10 metal style membrane and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: -5°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 457.64 x 379.24 x 61.25 mm
- Weight: 6.3 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 1940T-C (P/N: 10IA1940T10X0)**
  19" SXGA LED backlight touch panel PC, Intel® Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPC 3154

15" TFT XGA 4:3 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- 4:3 15" XGA fanless LED panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 15" fanless panel PC APPC 3154 incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1024 x 768 (XGA) resolution and 350-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

Specifications

Panel

- LCD size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 350cd/m2
- Contrast ratio: 800
- LCD color: 16.2M
- Viewing angle: 70 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.0GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485
- COM #2: RS232/422/485

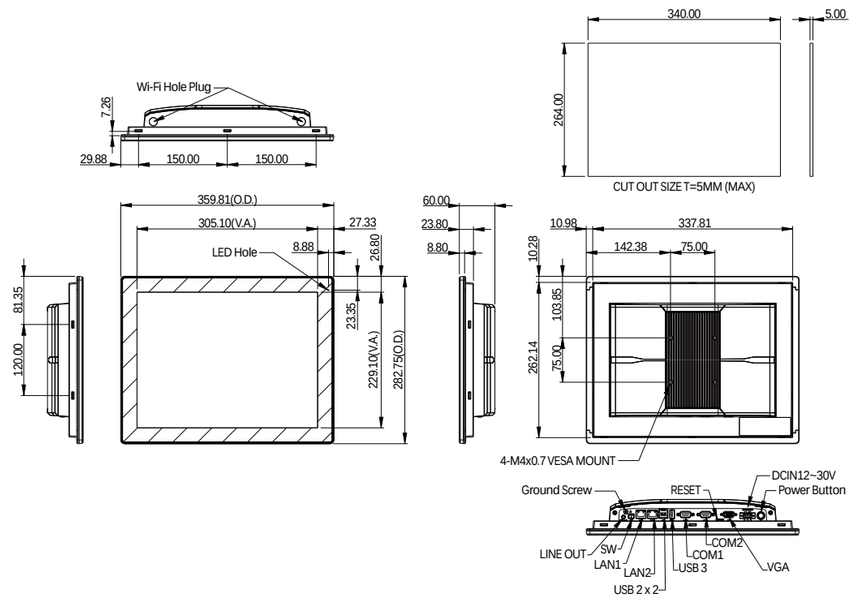
Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Color: Plastic housing black\Pantone black front touch\RAL 15 00 hairline rear bezel and repair cover
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: 0°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 359.8 x 282.7 x 60mm
- Weight: 3.3 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 3154 (P/N: 79IA315401X00)**
  15" XGA LED backlight touch panel PC, Intel® Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPC 5164P

15.6” TFT HD 16: 9 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Main Features

- 16: 9 HD fanless LED panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 15.6" fanless panel PC APPC 5164P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1366 x 768 (HD) resolution and 400-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

Specifications

Panel

- LCD size: 15.6", 16:9
- Resolution: HD 1366 x 768
- Luminance: 400cd/m²
- Contrast ratio: 800
- LCD color: 16.7M
- Viewing angle: 50 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.0GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485
- COM #2: RS232/422/485

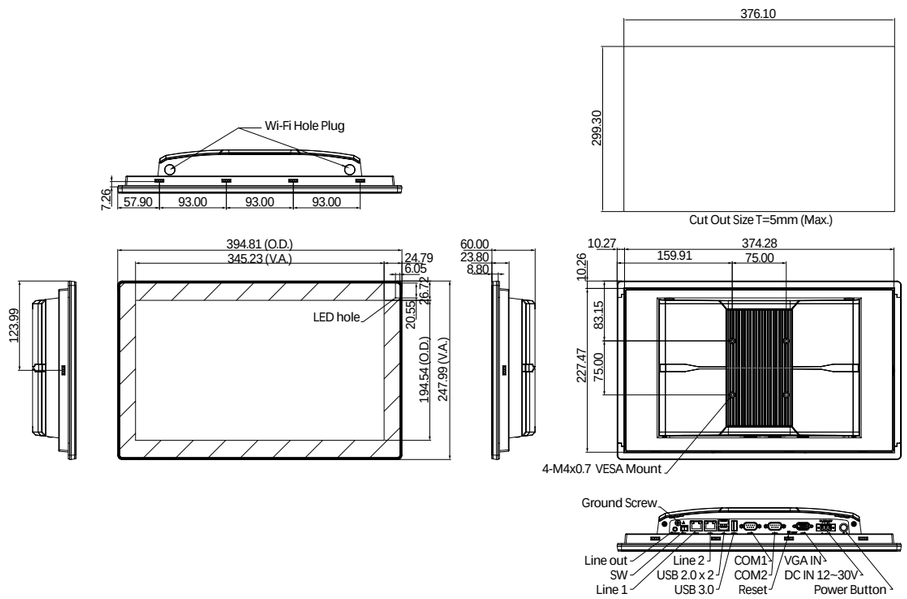
Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Color: Plastic housing black\Pantone black front touch\RAL 15 00 hairline rear bezel and repair cover
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: 0°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 394.81 x 247.99 x 60mm
- Weight: 4.3 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 5164P (P/N: TBC)**
  15.6” HD LED backlight touch panel PC, Intel® Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPC 5214P

21.5" TFT Full HD 16: 9 Flush Panel PC with Intel® Celeron® J1900, up to 2.0GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM

Coming soon

Main Features

- 16: 9 Full HD fanless LED panel computer
- Intel® Celeron® J1900, Quad Core, low consumption CPU
- Flush panel by 5-wire touch screen
- Dual GbE/2nd display-VGA/Line-out
- 3 x USB/2 x mini-PCIe sockets/2 x RS232/422/485
- DDR3L 4GB/2.5" HDD bracket
- IP65 compliant front panel
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12V~30VDC

Product Overview

The 21.5" fanless panel PC APPC 5214P incorporating an industrial motherboard is intended for versatile industrial applications. The panel PC has a touch screen LED backlight LCD panel with 1920 x 1080 (Full HD) resolution and 250-nit brightness. The front panel which adopts flush design and complies with IP65 standard makes it the perfect fit in industrial applications.

Specifications

Panel

- LCD size: 21.5", 16: 9
- Resolution: Full HD 1920 x 1080
- Luminance: 250cd/m²
- Contrast ratio: 800
- LCD color: 16.2M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB

System

- CPU: on-board Intel® Celeron® Quad Core processor J1900, up to 2.0GHz, 2M L2 cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- Ethernet: 2 x RJ45
- 2nd display VGA port: 1 x DB15
- Audio port: 1 x Line-out
- USB: 2 x USB 2.0, 1 x USB 3.0
- Power switch
- Reset button
- 2-Pin remote power on/off switch
- COM #1: RS232/422/485
- COM #2: RS232/422/485

Audio

- HD audio codec: realtek ALC886-GR
- Audio interface: Line-out

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Base-Tx Ethernet compatible

Dimension Drawing

Coming soon

Mechanical & Environment

- Color: Plastic housing black\Pantone black front touch\RAL 15 00 hairline rear bezel and repair cover
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~30VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64 (w/HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Temperature
  - Operating temperature: 0°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing limits to be at 90% RH at max 50°C
- Dimension: 539.04 x 330.5 x 65.8 mm (TBC)
- Weight: 5.5 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **APPC 5214P (P/N: TBC)**
  21.5" Full HD LED backlight touch panel PC, Intel® Celeron® J1900 up to 2.0GHz, touch screen, 4GB DDR3L, 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

APPD 1205T

12.1" IP65 Industrial 4:3 XGA LCD Flush Touch Monitor

Main Features

- IP65 compliant plastic front bezel with flush panel by 5-wire touch screen
- Dual display input interface: analog VGA and DVI-D
- Shares identical appearance with APPC series
- Dual touch screen interface: RS232 and USB
- Ultra slim in depth
- OSD multilanguage function

Product Overview

12.1" 4:3 LCD display APPD 1205T is based on a 5-wire resistive touch screen. It has 500 nits brightness and can support resolutions up to 1024 x 768. APPD 1205T is ideal for space-critical environments where systems and displays are kept apart. In addition, APPD 1205T adopts a flush panel design and has IP65 front panel. APPD 1205T provides prevailing video interfaces: VGA and DVI, supporting both digital and analog signals; touch screen can be connected with RS232 or USB ports. Moreover, APPD 1205T supports 12~24VDC power input and offers panel mount and VESA mount, allowing users to choose the mounting method that meets their situation. APPD 1205T is the best solution for NEXCOM NISE fanless computer, NViS security surveillance series and APPC panel PC when a second display is required.

Specifications

Panel

- LCD size: 12.1", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 500cd/m^2
- Contrast ratio: 700
- LCD color: 16.7M
- Viewing angle: 70 (U), 70 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 80%
- Interface: USB and RS232

Rear I/O

- Touch screen interface port: RS-232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal Blocks

OSD Function

- OSD keypad
- Multilanguage OSD

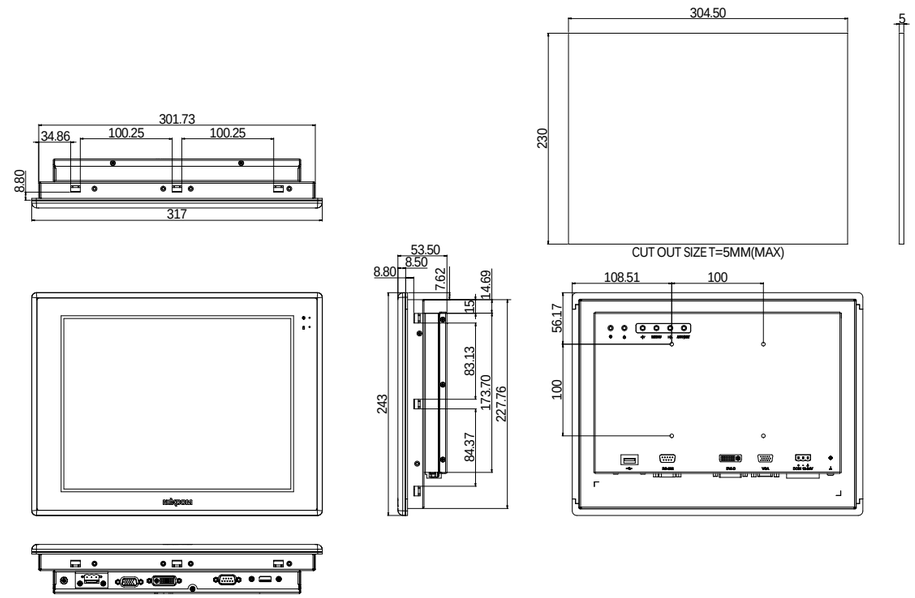
Mechanical & Environment

- Color: Pantone black and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~24VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64
  - 2Grms @ sine, 5~500Hz, 1hr/axis (operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - 20G@wall mount, half sine, 11ms
  - Operating temperature: -5°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 317 x 243 x 53.5mm
- Weight: 2.8 kg

Certifications

- CE approval
- FCC Class B

Dimension Drawing



Ordering Information

- **APPD 1205T-B (P/N: 10IA1205T01X0)**
  12.1" XGA industrial 4:3 TFT LED backlight flush touch monitor with VGA and DVI-D input, 12~24VDC input, RS-232 and USB touch screen interfaces

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**
- **1.8m DVI-D male to DVI-D male cable (P/N: 603DVI0007X00)**

APPD 1500T

15" IP65 Industrial 4:3 XGA LCD Flush Touch Monitor

Main Features

- IP65 compliant plastic front bezel with flush panel by 5-wire touch screen
- Dual display input interface: analog VGA and DVI-D
- Shares identical appearance with APPC series
- Dual touch screen interface: RS232 and USB
- Ultra slim in depth
- OSD multilanguage function

Product Overview

15" 4:3 LCD display APPD 1500T is based on a 5-wire resistive touch screen. It has 500 nits brightness and can support resolutions up to 1024 x 768. APPD 1500T is ideal for space-critical environments where systems and displays are kept apart. In addition, APPD 1500T adopts a flush panel design and has IP65 front panel. APPD 1500T provides prevailing video interfaces: VGA and DVI, supporting both digital and analog signals; touch screen can be connected with RS-232 or USB ports. Moreover, APPD 1500T supports 12~24VDC power input and offers panel mount and VESA mount, allowing users to choose the mounting method that meets their situation. APPD 1500T is the best solution for NEXCOM NISE fanless computer, NViS security surveillance series and APPC panel PC when a second display is required.

Specifications

Panel

- LCD size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 400cd/m^2
- Contrast ratio: 2500
- LCD color: 16.7M
- Viewing angle: 88 (U), 88 (D), 88 (L), 88 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB and RS232

Rear I/O

- Touch screen interface port: RS-232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

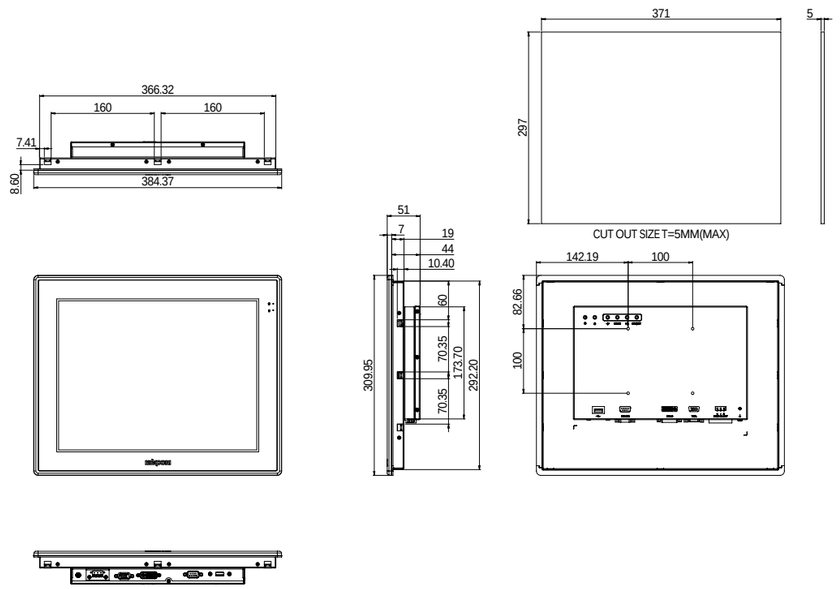
Mechanical & Environment

- Color: Pantone black and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~24VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64
  - 2Grms @ sine, 5~500Hz, 1hr/axis (operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - 20G@wall mount, half sine, 11ms
  - Operating temperature: -5°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 384.37 x 309.95 x 51mm
- Weight: 3.9 kg

Certifications

- CE approval
- FCC Class B

Dimension Drawing



Ordering Information

- **APPD 1500T-C (P/N: 10IA1500T00X0)**
  15" XGA industrial 4:3 LED backlight flush touch monitor with VGA and DVI-D input, 12~24VDC input, RS232 and USB touch screen interfaces

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**
- **1.8m DVI-D male to DVI-D male cable (P/N: 603DVI0007X00)**

APPD 1700T

17" IP65 Industrial 4:3 SXGA LCD Flush Touch Monitor

Main Features

- IP65 compliant plastic front bezel with flush panel by 5-wire touch screen
- Dual display input interface: analog VGA and DVI-D
- Shares identical appearance with APPC series
- Dual touch screen interface: RS232 and USB
- Ultra slim in depth
- OSD multilanguage function

Product Overview

17" 4:3 LCD display APPD 1700T is based on a 5-wire resistive touch screen. It has 350 nits brightness and can support resolutions up to 1280 x 1024. APPD 1700T is ideal for space-critical environments where systems and displays are kept apart. In addition, APPD 1700T adopts a flush panel design and has IP65 front panel. APPD 1700T provides prevailing video interfaces: VGA and DVI, supporting both digital and analog signals; touch screen can be connected with RS232 or USB ports. Moreover, APPD 1700T supports 12~24VDC power input and offers panel mount and VESA mount, allowing users to choose the mounting method that meets their situation. APPD 1700T is the best solution for NEXCOM NISE fanless computer, NViS security surveillance series and APPC panel PC when a second display is required.

Specifications

Panel

- LCD size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m^2
- Contrast ratio: 800
- LCD color: 16.7M
- Viewing angle: 60 (U), 80 (D), 80 (L), 80 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB and RS232

Rear I/O

- Touch interface port: RS232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

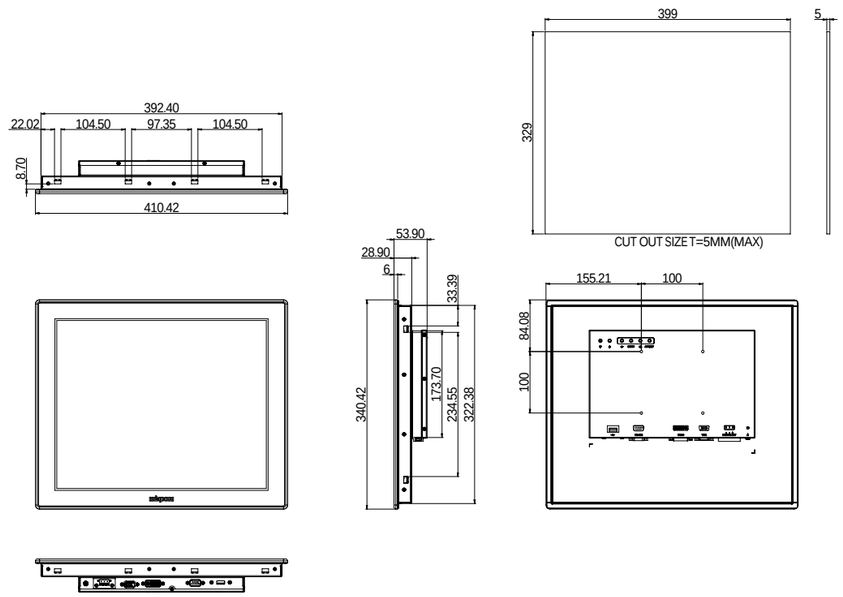
Mechanical & Environment

- Color: Pantone black and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~24VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64
  - 2Grms @ sine, 5~500Hz, 1hr/axis (operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - 20G@wall mount, half sine, 11ms
  - Operating temperature: -5°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 410.4 x 340.4 x 53.9mm
- Weight: 4.8 kg

Certifications

- CE approval
- FCC Class B

Dimension Drawing



Ordering Information

- **APPD 1700T-C (P/N: 10IA1700T00X0)**
  17" SXGA industrial 4:3 LCD flush touch monitor with VGA and DVI-D input, 12~24VDC input, RS-232 and USB touch screen

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**
- **1.8m DVI-D male to DVI-D male cable (P/N: 603DVI0007X00)**

APPD 1900T

19" IP65 Industrial 4:3 SXGA LCD Flush Touch Monitor

Main Features

- IP65 compliant plastic front bezel with flush panel by 5-wire touch screen
- Dual display input interface: analog VGA and DVI-D
- Shares identical appearance with APPC series
- Dual touch screen interface: RS232 and USB
- Ultra slim in depth
- OSD Multilanguage function

Product Overview

19" 4:3 LCD display APPD 1900T is based on a 5-wire resistive touch screen. It has 350 nits brightness and can support resolutions up to 1280 x 1024. APPD 1900T is ideal for space-critical environments where systems and displays are kept apart. In addition, APPD 1900T adopts a flush panel design and has IP65 front panel. APPD 1900T provides prevailing video interfaces: VGA and DVI, supporting both digital and analog signals; touch screen can be connected with RS232 or USB ports. Moreover, APPD 1900T supports 12~24VDC power input and offers panel mount and VESA mount, allowing users to choose the mounting method that meets their situation. APPD 1900T is the best solution for NEXCOM NISE fanless computer, NViS security surveillance series and APPC panel PC when a second display is required.

Specifications

Panel

- LCD size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350cd/m^2
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch Screen

- 5-Wire resistive (flush panel type)
- Light transmission: 81%
- Interface: USB and RS232

Rear I/O

- Touch interface port: RS-232 (1 x DB9)/USB type A
- Video port: VGA (1 x DB15)/DVI-D (1 x DVI-I connector)
- DC power input connector: 3-pin Phoenix terminal blocks

OSD Function

- OSD keypad
- Multilanguage OSD

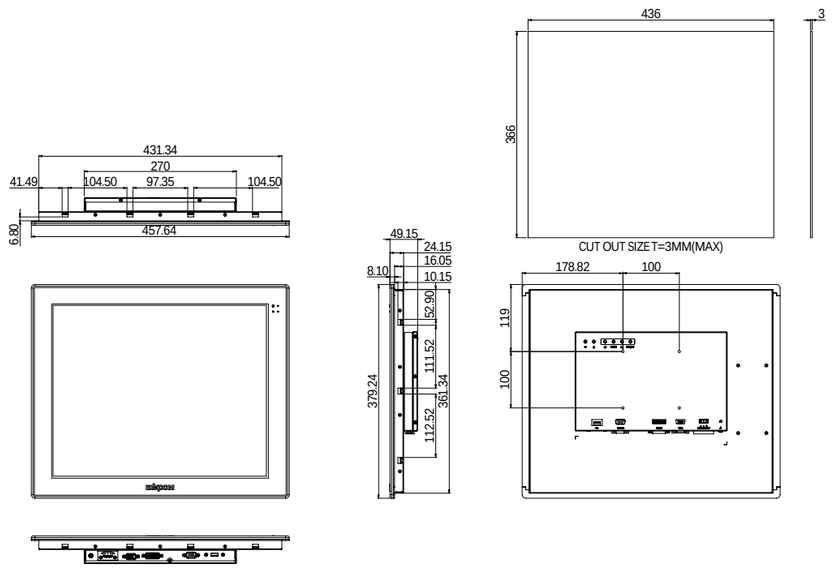
Mechanical & Environment

- Color: Pantone black and black silver PC box
- IP protection: IP65 front
- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power
  - Power input: 12V~24VDC
  - Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration
  - IEC 68 2-64
  - 2Grms @ sine, 5~500Hz, 1hr/axis (operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock
  - IEC 68 2-27
  - 20G@wall mount, half sine, 11ms
  - Operating temperature: -5°C~50°C
  - Storage temperature: -20°C~75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 457.64 x 379.24 x 49.15mm
- Weight: 5.5 kg

Certifications

- CE approval
- FCC Class B

Dimension Drawing



Ordering Information

- **APPD 1900T-C (P/N: 10IA1900T02X0)**
  19" SXGA industrial 4:3 LED backlight flush touch monitor with VGA and DVI-D input, 12~24VDC input, RS232 and USB touch screen interfaces

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**
- **1.8m DVI-D male to DVI-D male cable (P/N: 603DVI0007X00)**

NISE 50

Intel Atom® Processor E3826 Dual Core Fanless System

Main Features

- Onboard Intel Atom® processor E3826 dual core, 1.46GHz
- 1 x HDMI display
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0
- 3 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 1 x RS232, 1 x RS232 (only Tx/Rx/GND), 1 x RS422/485 with auto flow control
- Support -5~55 degree C operating temperature
- Support 24V DC input

Product Overview

Powered by the latest generation of Intel Atom® processor E3826 (formerly codenamed "Bay Trail-I"), NISE 50 series positions at the intelligent IoT gateway for factory automation and for smart city applications. Up to 4G onboard DDR3L memory, the NISE 50 series support operating temperature from -5 up to 55 degree C with 24V DC input with +/-20% range. The NISE 50 series have strong connectivity - Ethernet-based LAN port and traditional RS485, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 3x mini-PCIe sockets which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 3.5G and 4G LTE module. NISE 50 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support

- Default: onboard Intel Atom® processor E3826 Dual Core, 1.46GHz
- Option: support Intel Atom® processor E3845 Quad Core, 1.91GHz (by request)

Main Memory

- Onboard 2GB DDR3L 1066/1333 RAM
  - Un-buffered and non-ECC
  - Max up to 4GB for option

Display Option

- 1 x HDMI display

I/O Interface-Front

- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI display output
- 4 x USB 2.0 (500mA per each)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface-Rear

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: full RS232 signal
  - COM2: RS232, only support Tx/Rx/GND
  - COM3: RS422/485 auto flow control
- 1 x Line-out
- Support 24V DC input

I/O Interface - Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x DB9, only support RS232, Tx/Rx/GND single

Storage Device

- Onboard 16GB EMMC
- Optional mSATA module

Expansion Slot

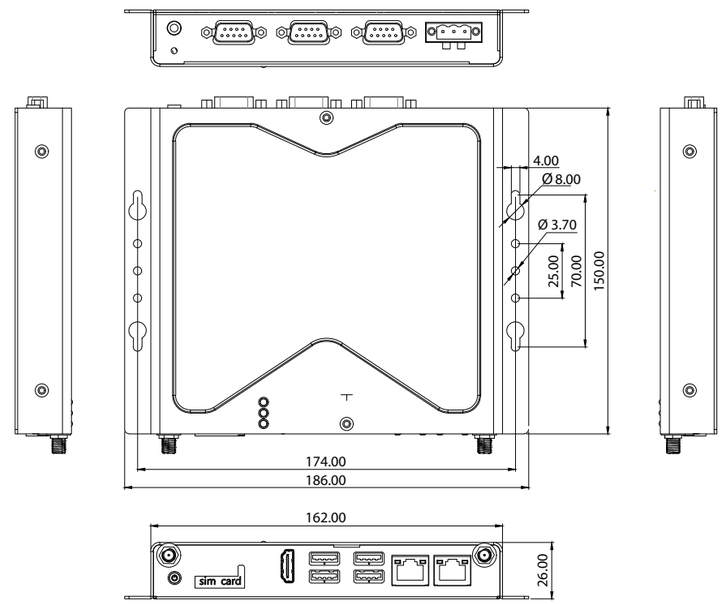
- 3 x mini-PCIe socket for optional Wi-Fi/3.5G modules

mini-PCIe	Size	USB	PCIe	mSATA	3.5G/4G
CN5	Full	v	N/A	Support	Support
CN6	Full	v	v	N/A	Support
CN7	Half	v	v	N/A	N/A

Power Requirements

- Power input: 24V DC +/-20%
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Support OS

Model Name		NISE 50		NISE 50-4G-32G		NISE 50W
Storage		eMMC 16GB	mSATA	eMMC 32GB	mSATA	SSD
Memory		2GB		4GB		2GB
OS	Ubuntu	32-bit		64-bit		
	Win10 IoT Ent.			64-bit	64-bit	
	WES8	32-bit	32-bit	64-bit	64-bit	32-bit
	Win7 Pro		32-bit		64-bit	32-bit
	WES7E		32-bit		64-bit	32-bit
	WEC7		32-bit		32-bit	32-bit

Dimensions

- 162mm (W) x 26mm (H) x 150mm (D) without wall-mount bracket

Construction

- Metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - mSATA/EMMC: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ mSATA or EMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A
- UL/cUL

Ordering Information

- **NISE 50 (P/N: 10J00005000X0)**
  Intel Atom® processor E3826 Dual Core fanless system, with onboard 16GB EMMC and 2G DDR3L RAM
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NISE 50-4G-32G

Intel Atom® Processor E3826 Dual Core Fanless System

Main Features

- Onboard Intel Atom® processor E3826 dual core, 1.46GHz
- 1 x HDMI display
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0
- 3 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 1 x RS232, 1 x RS232 (only Tx/Rx/GND), 1 x RS422/485 with auto flow control
- Support -5~55 degree C operating temperature
- Support 24V DC input

Product Overview

Powered by the latest generation of Intel Atom® processor E3826 (formerly codenamed "Bay Trail-I"), NISE 50-4G-32G series positions at the intelligent IoT gateway for factory automation and for smart city applications. 4G onboard DDR3L memory, the NISE 50-4G-32G series support operating temperature from -5 up to 55 degree C with 24V DC input with +/-20% range. The NISE 50-4G-32G series have strong connectivity - Ethernet-based LAN port and traditional RS485, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 3x mini-PCIe sockets which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 3.5G and 4G LTE module. NISE 50-4G-32G is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support

- Default: onboard Intel® Atom™ processor E3826 Dual Core, 1.46GHz

Main Memory

- Onboard 4GB DDR3L 1066/1333 RAM
  - Un-buffered and non-ECC

Display Option

- 1 x HDMI display

I/O Interface-Front

- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI display output
- 4 x USB 2.0 (500mA per each)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface-Rear

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: full RS232 signal
  - COM2: RS232, only support Tx/Rx/GND
  - COM3: RS422/485 auto flow control
- 1 x Line-out
- Support 24V DC input

I/O Interface - Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x DB9, only support RS232, Tx/Rx/GND single

Storage Device

- Onboard 32GB EMMC
- Optional mSATA module

Expansion Slot

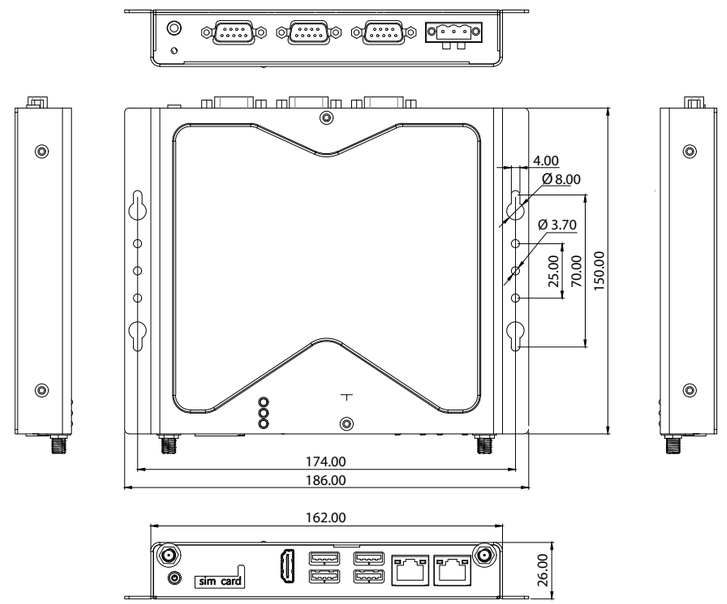
- 3 x mini-PCIe socket for optional Wi-Fi/3.5G modules

mini-PCIe	Size	USB	PCIe	mSATA	3.5G/4G
CN5	Full	v	N/A	Support	Support
CN6	Full	v	v	N/A	Support
CN7	Half	v	v	N/A	N/A

Power Requirements

- Power input: 24V DC +/-20%
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Support OS

Model Name		NISE 50		NISE 50-4G-32G		NISE 50W
Storage		eMMC 16GB	mSATA	eMMC 32GB	mSATA	SSD
Memory		2GB		4GB		2GB
OS	Android4.4	64bit		64bit		
	WIN10 IOT Ent.			64bit	64bit	
	WES8	32bit	32bit	64bit	64bit	32bit
	WIN 7 PRO		32bit		64bit	32bit
	WES7E		32bit		64bit	32bit
	WEC7		32bit		32bit	32bit

* Note: only one LAN can be active under Android 4.4

Dimensions

- 162mm (W) x 26mm (H) x 150mm (D) without wall-mount bracket

Construction

- Metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - mSATA/EMMC: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ mSATA or EMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A
- UL/cUL

Ordering Information

- **NISE 50-4G-32G (P/N: 10J00005013X0)**
  Intel Atom® processor E3826 Dual Core fanless system, with onboard 32GB EMMC and 4G DDR3L RAM
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NISE 50W

Intel Atom® Processor E3826 Dual Core Fanless System

Main Features

- Onboard Intel Atom® processor E3826 dual core, 1.46GHz
- 1 x HDMI display
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0
- 3 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 1 x RS232, 1 x RS232 (only Tx/Rx/GND), 1 x RS422/485 with auto flow control
- Support -5~55 degree C operating temperature
- Support 24V DC input
- 1 x 2.5" front accessible HDD tray

Product Overview

Powered by the latest generation of Intel Atom® processor E3826 (formerly codenamed "Bay Trail-I"), NISE 50 series positions at the intelligent IoT gateway for factory automation and for smart city applications. Up to 4G onboard DDR3L memory, the NISE 50 series support operating temperature from -5 up to 55 degree C with 24V DC input with +/-20% range. The NISE 50 series have strong connectivity - Ethernet-based LAN port and traditional RS485, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 3x mini-PCIe sockets which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 3.5G and 4G LTE module. NISE 50 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support

- Default: onboard Intel Atom® processor E3826 Dual Core, 1.46GHz
- Option: support Intel Atom® processor E3845 Quad Core,1.91GHz (by request)

Main Memory

- Onboard 2GB DDR3L 1066/1333 RAM
  - Un-buffered and non-ECC
  - Max up to 4GB for option

Display Option

- 1 x HDMI display

I/O Interface-Front

- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210-AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI display output
- 4 x USB 2.0 (500mA per each)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface-Rear

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: full RS232 signal
  - COM2: RS232, only support Tx/Rx/GND
  - COM3: RS422/485 auto flow control
- 1 x Line-out
- Support 24V DC input

I/O Interface - Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x DB9, only support RS232, Tx/Rx/GND single

Storage Device

- Onboard 16GB EMMC
- Optional mSATA module
- Optional 2.5" HDD/SSD in 7mm thickness

Expansion Slot

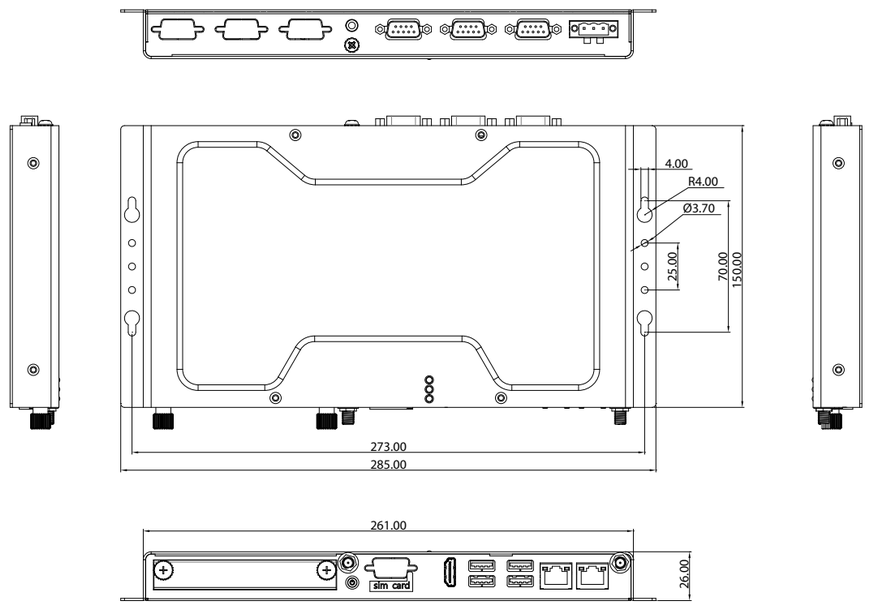
- 3 x mini-PCIe socket for optional Wi-Fi/3.5G modules

mini-PCIe	Size	USB	PCIe	mSATA	3.5G/4G
CN5	Full	v	N/A	Support	Support
CN6	Full	v	v	N/A	Support
CN7	Half	v	v	N/A	N/A

Power Requirements

- Power input: 24V DC +/-20%
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Support OS

Model Name		NISE 50		NISE 50-4G-32G		NISE 50W
Storage		eMMC 16GB	mSATA	eMMC 32GB	mSATA	SSD
Memory		2GB		4GB		2GB
OS	Android4.4	64-bit		64-bit		
	Win10 IoT Ent.			64-bit	64-bit	
	WES8	32-bit	32-bit	64-bit	64-bit	32-bit
	Win7 Pro		32-bit		64-bit	32-bit
	WES7E		32-bit		64-bit	32-bit
	WEC7		32-bit		32-bit	32-bit

* Note: only one LAN can be active under Android 4.4

Dimensions

- 261mm(W) x 26mm(H) x 150mm(D) without wall-mount bracket

Construction

- Metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - SSD/mSATA: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ SSD or mSATA condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A
- UL/cUL

Ordering Information

- **NISE 50W (P/N:10J00005011X0)**
  Intel Atom® processor E3826 Dual Core fanless system, with onboard 16GB EMMC and 2G DDR3L RAM
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NISE 50-J1900

Intel® Celeron® Processor J1900 Quad Core Fanless System

Microsoft Azure Certified

aws qualified device internet of things

Main Features

- Onboard Intel® Celeron® processor J1900 quad core, 2.42GHz
- 1 x HDMI display
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0
- 3 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 2 X RS232, 1 x RS422/485 with auto flow control
- Support -5~55 degree C operating temperature
- Support 12V DC input

Product Overview

Powered by the latest generation of Intel® Celeron® processor J1900 (formerly codenamed "Bay Trail"), NISE 50 series positions at the intelligent IoT gateway for factory automation and for smart city applications. DDR3L SODIMM memory socket, the NISE 50 series support operating temperature from -5 up to 55 degree C with 12V DC input with +/-20% range. The NISE 50 series have strong connectivity - Ethernet-based LAN port and traditional RS485, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 3x mini-PCIe sockets which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 3.5G and 4G LTE module. NISE 50 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support

- Default: onboard Intel® Celeron® processor J1900 quad Core, 2.42GHz

Main Memory

- DDR3L SODIMM Slot *1
  - Support 1066/1333 RAM
  - Un buffered and non ECC
  - Support maximum up to 4GB for option

Display Option

- 1 x HDMI display

I/O Interface-Front

- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI display output
- 4 x USB 2.0 (500mA per each)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface-Rear

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: full RS232 signal
  - COM2: full RS232 signal
  - COM3: RS422/485 auto flow control
- Support 12V DC input

I/O Interface - Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x RS232, pin header, support RS232 Tx/Rx/GND signal only

Storage Device

- Optional mSATA module

Expansion Slot

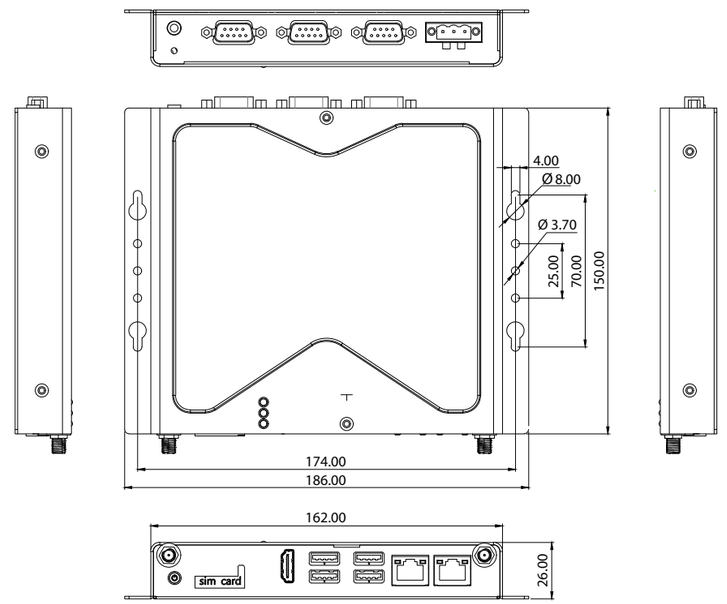
- 3 x mini-PCIe socket for optional Wi-Fi/3.5G modules

mini-PCIe	Size	USB	PCIe	SATA	Msata	3.5G/4G	Wi-Fi
CN5	Full	v	N/A	v	Support	Support	N/A
CN6	Full	v	v	x	N/A	Support	Support
CN7	Half	x	v	x	N/A	N/A	Support

Power Requirements

- Power input: 12V DC +/-20%
- 1 x Optional 12V, 60W power adapter

Dimension Drawing



Support OS

- Win7 64-bit
- Win10 64-bit

Dimensions

- 162mm (W) x 26mm (H) x 150mm (D) without wall-mount bracket

Construction

- Metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - mSATA: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ mSATA condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Ordering Information

- **NISE 50-J1900 (P/N: 10J00005029X0)**
  Intel® Celeron® processor J1900 quad Core fanless system, with DDR3L RAM SODIMM slot
- **60W 12V/5A AC/DC power adapter w/o power cord (P/N: 7400060042X00)**

NISE 50-E3845

Intel® Atom™ Processor E3845 Quad Core Fanless System

Main Features

- Onboard Intel® Atom™ processor E3845 quad core, 2.42GHz
- 1 x HDMI display
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0
- 3 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE modules
- 2 X RS232, 1 x RS422/485 with auto flow control
- Support -5~55 degree C operating temperature
- Support 12V DC input

Product Overview

Powered by the latest generation of Intel® Atom™ processor E3845 (formerly codenamed "Bay Trail-I"), NISE 50 series positions at the intelligent IoT gateway for factory automation and for smart city applications. DDR3L SODIMM memory socket, the NISE 50 series support operating temperature from -5 up to 55 degree C with 12V DC input with +/-20% range. The NISE 50 series have strong connectivity - Ethernet-based LAN port and traditional RS485, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 3x mini-PCIe sockets which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 3.5G and 4G LTE module. NISE 50 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support

- Default: onboard Intel® Atom™ processor E3845 quad Core, 2.42GHz

Main Memory

- DDR3L SODIMM Slot *1
  - Support 1066/1333 RAM
  - Un buffered and non ECC
  - Support maximum up to 4GB for option

Display Option

- 1 x HDMI display

I/O Interface-Front

- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI display output
- 4 x USB 2.0 (500mA per each)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface-Rear

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: full RS232 signal
  - COM2: full RS232 signal
  - COM3: RS422/485 auto flow control
- Support 12V DC input

I/O Interface - Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x DB9, only support RS232, Tx/Rx/GND single

Storage Device

- Optional mSATA module

Expansion Slot

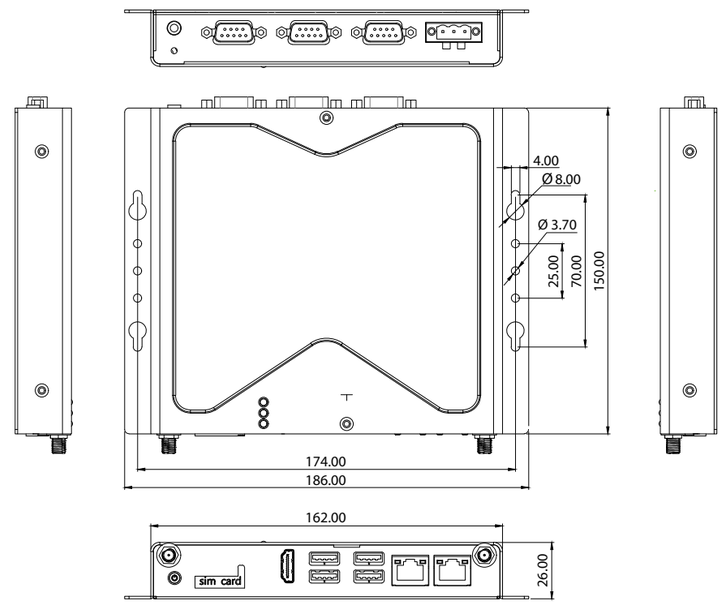
- 3 x mini-PCIe socket for optional Wi-Fi/3.5G modules

mini-PCIe	Size	USB	PCIe	mSATA	3.5G/4G
CN5	Full	v	N/A	Support	Support
CN6	Full	v	v	N/A	Support
CN7	Half	v	v	N/A	N/A

Power Requirements

- Power input: 12V DC +/-20%
- 1 x Optional 12V, 60W power adapter

Dimension Drawing



Support OS

- Win7 64-bit
- Win10 64-bit MUI

Dimensions

- 162mm (W) x 26mm (H) x 150mm (D) without wall-mount bracket

Construction

- Metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - mSATA: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ mSATA condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Ordering Information

- **NISE 50-E3845 (P/N: 10J00005015X0)**
  Intel® Atom™ processor E3845 quad Core fanless system, with DDR3L RAM SODIMM slot
- **60W 12V/5A AC/DC power adapter w/o power cord (P/N: 7400060042X00)**

NISE 51

Intel® Celeron® Processor N3350 Dual Core Fanless System

Main Features

- Onboard Intel® Celeron® processor N3350 Dual Core, 2.4GHz
- 1 x DP display
- 2 x Intel® I211AT GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 2.0
- 2 x USB 3.0
- 1 x mini-PCIe sockets for optional Wi-Fi/3.5G/LTE module
- 2 x M.2 slot for Wi-Fi/Bluetooth and storage/LTE modules
- 2 x RS232, 1 x RS422/485 with auto flow control
- Support -5~55 degree C operating temperature
- Support 12V and 24V DC input

Product Overview

Powered by the latest generation of Intel® Celeron® processor N3350 (formerly codenamed "Apollo Lake"), NISE 51 series positions at the intelligent IoT gateway for factory automation and for smart city applications. DDR3L SODIMM memory socket, the NISE 51 series support operating temperature from -5 up to 55 degree C with 12V/24V DC input with +/-10% range. The NISE 51 series have strong connectivity - Ethernet-based LAN port and traditional RS485, mainly for Modbus TCP or Modbus RTU communication. For wireless connectivity, there are 1 x mini-PCIe sockets and 2 x M.2 slots which can support optional wireless modules for IoT applications, for example, Wi-Fi, Bluetooth, 3.5G and 4G LTE module as well as storage module. NISE 51 is definitely the best choice for M2M intelligent system as an intelligent IoT gateway.

Specifications

CPU Support

- Onboard Intel® Celeron® processor N3350 Dual Core, 2.4GHz
- Onboard Intel Atom® processor E3950 Quad Core, 2.0GHz

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1866 8GB RAM max., un-buffered and non-ECC

Display Option

- 1 x DP display

I/O Interface-Front

- ATX power on/off switch
- 1 x Storage/2 x GPO programmable LED
- 1 x SIM card holder
- 2 x Intel® I211-AT GbE LAN ports; support WoL, teaming and PXE
- 1 x DP display output
- 2 x USB 2.0
- 2 x USB 3.0
- 3 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface-Rear

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1/COM2: full RS232 signal
  - COM3: RS422/485 auto flow control
- 1 x Line-out
- Support 12V/24V DC input

I/O Interface - Internal

- 4 x GPI and 4 x GPO (programmable to GPI or GPO)
- 1 x RS232, pin header,support RS232 TX/RX/GND signal only

Storage Device

- Onboard 16GB EMMC, max up to 32G by request
- Optional M.2 B, BM key 2242 module

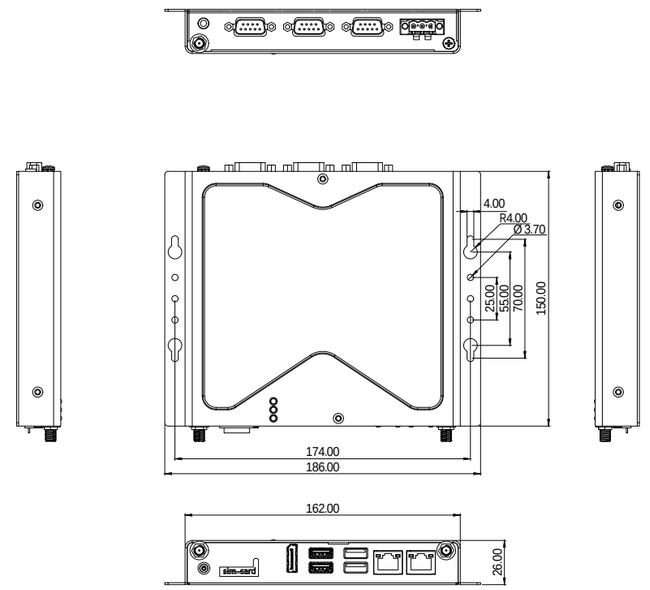
Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/3.5G module and 2 x M.2 slot for optional WiFi/Bluetooth and LTE modules

mini-PCIe Slot	Configuration	USB	PCIe	SATA	3.5G/4G	Wi-Fi/Bluetooth	Storage
Mini_card1	Full size	v	v	N/A	Support	Support	N/A

M.2 Slot	Configuration	USB	PCIe	SATA	3.5G/4G	Wi-Fi/Bluetooth	Storage
M.2_Key_A1	A Key 2230	v	v	N/A	N/A	Support	N/A
M.2_Key_B1	BKey 2242/3042	v (3042)	N/A	v (2242)	Support (3042)	N/A	Support (2242)

Dimension Drawing



Power Requirements

- Power input: 12V/24V DC +/-10%
- 1 x Optional 24V, 60W power adapter

Support OS

- Linux Kernel version 4.1 (storage: 16GB eMMC)
- Windows 10 IoT Enterprise (storage: M.2 is recommended)

Dimensions

- 162mm (W) x 26mm (H) x 150mm (D) without wall-mount bracket

Construction

- Metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 75°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - M.2/EMMC: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/M.2 or EMMC condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Ordering Information

- **NISE 51 (P/N: 10J00005100X0)**
  Intel® Celeron® processor N3350 Dual Core fanless system, with onboard 16GB EMMC
- **NISE 51-E3950 (P/N: 10J00005101X0)**
  Intel Atom® processor E3950 Quad Core fanless system, with onboard 16GB eMMC
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NISE 105

Intel Atom® Processor E3826 Dual Core Fanless System

Main Features

- Onboard Intel Atom® processor E3826 dual core, 1.46GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I120IT GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 2.0, 1 x USB 3.0
- 4 x COM ports (COM1 & COM2 with RS232/422/485, jumper-free setting)
- 1 x Optional interface for optional Wi-Fi/3.5G modules
- External RTC battery holder for easy replacement
- Support -20 to 70°C extended operating temperature
- Support 9-30VDC input (nominal DC input: 24V)

Product Overview

Powered by the latest generation of Intel Atom® processor E3826 (formerly codenamed "Bay Trail-I"), the NISE 105 provides outstanding performance not only on computing but also on graphics, and it presents a brand new opportunity for both intelligent and industrial computing solutions. NISE 105 support ACP ThinManager that offers management solutions for the modern factory by simplifying management and also support Indusoft for HMI and SCADA. Up to 8G DDR3L memory, NISE 105 have several options on storage devices like CFast, HDD and SSD. The NISE 105 is also the 1st system in compact NISE 100 series to support extended operating temperature from -20 to 70 degrees Celsius. In addition to no cable connection on the NISE 105, it brings NISE 105 the sustainability to work in harsh environment both with temperature and vibration concern. The NISE 105 has high integration ability with optional mini-PCIe module and 4 x COM ports, which makes it a real intelligent system for various applications such as factory automation applications (with optional PROFIBUS®, PROFINET®, DeviceNET®, EtherCAT®, EtherNet/IP™ Master module), network applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 105 is definitely the top choice for M2M intelligent system and factory automation platforms.

Specifications

CPU Support

- Onboard Intel Atom® processor E3826 Dual Core, 1.46GHz
- Support Intel Atom® E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - HDMI and DVI-D
  - HDMI and VGA (via DVI-I to VGA converter)

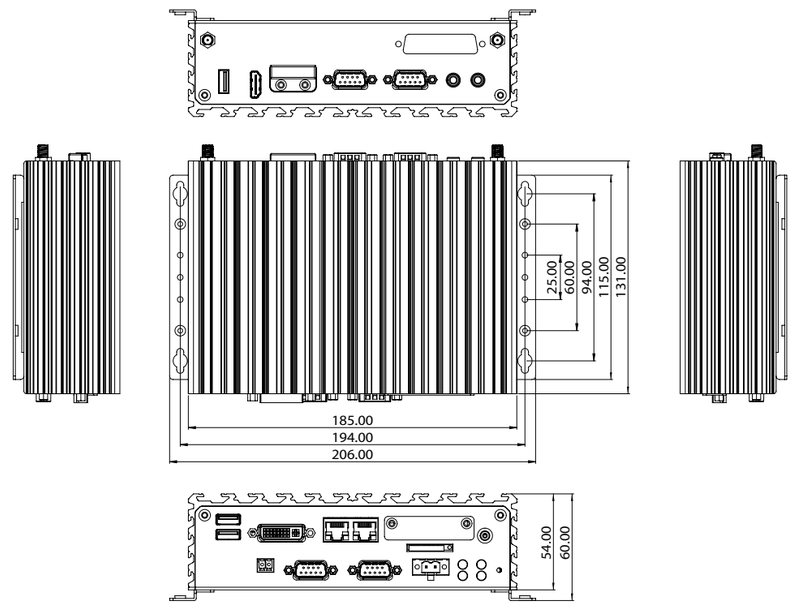
I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing LEDs
- 1 x External CFast socket
- 1 x SIM card holder
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 1 x USB 2.0 (500mA per each)
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
  - Support 5V/12V/Ring function by jumper setting, ring as the default (COM2 only)
- 1 x Remote power on/off switch
- 1 x 2-pin DC input, support +9 to 30VDC input (nominal DC input: 24V)

I/O Interface - Rear

- 1 x USB 2.0
- 1 x HDMI
- 1 x RTC battery
- 2 x DB9 for COM3 & COM4 support RS232 only
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G modules

Dimension Drawing



I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

Storage Device

- 1 x CFast (SATA 2.0)
- 1 x 2.5" HDD (SATA 2.0)

Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/3.5G modules

Power Requirement

- Power input: +9VDC to +30VDC (nominal DC input: 24V)
- 1 x Optional 24V, 60W power adapter

Support OS

- Windows 8, 32-bit/64-bit
- Windows Embedded Standard 8, 32-bit/64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Windows Embedded Compact 7, 32-bit
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 3.8.0

Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 70°C with industrial grade device (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  - Random: 2Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A
- UL/cUL

Ordering Information

- **NISE 105 (P/N: 10J00010501X0)**
  Intel Atom® processor E3826 Dual Core fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060032X00)**

NISE 105-E3845

Intel Atom® Processor E3845 Quad Core Fanless System

Main Features

- Onboard Intel Atom® processor E3845 Quad Core, 1.91GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 2.0 & 1 x USB 3.0
- 4 x COM ports (COM1&COM2 with RS232/422/485, jumper-free setting)
- 1 x Optional interface for optional Wi-Fi/3.5G modules
- External RTC battery holder for easy replacement
- Support -5~55 degree C operating temperature
- Support 9-30VDC input (nominal DC input: 24V)

Product Overview

Powered by the latest generation of Intel Atom® processor E3845 (formerly codenamed "Bay Trail-I"), the NISE 105-E3845 provides outstanding performance not only on computing but also on graphics, and it presents a brand new opportunity for both intelligent and industrial computing solutions. NISE 105-E3845 support ACP ThinManager that offers management solutions for the modern factory by simplifying management and also support Indusoft for HMI and SCADA. Up to 8G DDR3L memory, NISE 105-E3845 have several options on storage devices like CFast, HDD and SSD. In addition to no cable connection on the NISE 105-E3845, it brings NISE 105-E3845 the sustainability to work in harsh environment both with temperature and vibration concern. The NISE 105-E3845 has high integration ability with optional mini-PCIe module and 4 x COM ports, which makes it a real intelligent system for various applications such as factory automation applications (with optional PROFIBUS®, PROFINET®, DeviceNET®, EtherCAT®, EtherNet/IP™ Master module), network applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 105-E3845 is definitely the top choice for M2M intelligent system and factory automation platforms.

Specifications

CPU Support

- Onboard Intel Atom® processor E3845 Quad Core, 1.91GHz

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - HDMI and DVI-D
  - HDMI and VGA (via DVI-I to VGA converter)

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing LEDs
- 1 x External CFast socket
- 1 x SIM card holder
- 2 x Intel® I210IT GbE LAN ports; support WoL,teaming and PXE
- 1 x DVI-I display output
- 1 x USB 3.0 (900mA per each)
- 1 x USB 2.0 (500mA per each)
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
  - Support 5V/12V/ring function by jumper setting, ring as the default (COM2 only)
- 1 x Remote power on/off switch
- 1 x 2-pin DC input, support +9 to 30VDC input (nominal DC input: 24V)

I/O Interface - Rear

- 1 x USB 2.0
- 1 x HDMI
- 1 x RTC battery
- 2 x DB9 for COM3 & COM4, both support RS232 only
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G modules

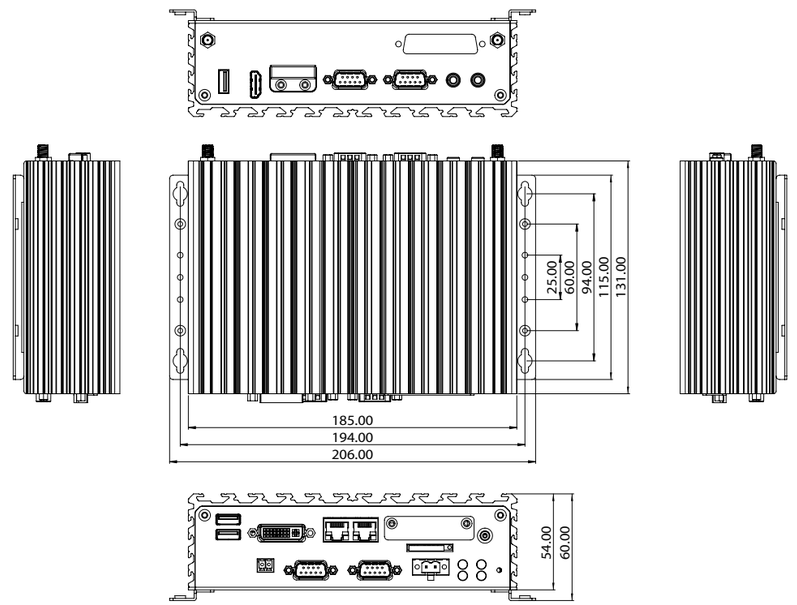
I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

Storage Device

- 1 x CFast (SATA 2.0)
- 1 x 2.5" HDD (SATA 2.0)

Dimension Drawing



Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/3.5G modules

Power Requirement

- Power input: +9VDC to +30VDC (nominal DC input: 24V)
- 1 x Optional 24V, 60W power adapter

Support OS

- Windows 8, 32-bit/64-bit
- Windows Embedded Standard 8, 32-bit/64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Windows Embedded Compact 7, 32-bit
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 3.8.0

Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C with industrial grade device (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A
- UL/cUL

Ordering Information

- **NISE 105-E3845 (P/N: 10J00010503X0)**
  Intel Atom® processor E3845 Quad Core fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060032X00)**

NISE 105U

Intel® Celeron® Processor J1900 Quad Core Fanless System

Main Features

- Onboard Intel® Celeron® processor J1900 quad core, 2.42GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 2.0, 1 x USB 3.0
- 4 x COM ports (COM1 & COM2 with RS232/422/485, jumper-free setting)
- 1 x Optional interface for optional Wi-Fi/3.5G
- Support -5 to 55 degrees Celsius operating temperature
- Support 9-30VDC input

Product Overview

Powered by Intel® Celeron® processor (formerly codenamed "Bay Trail"), the NISE 105U provides outstanding performance not only on computing but also on graphics, and it presents a brand new opportunity for both intelligent and industrial computing solutions. NISE 105U support ACP ThinManager that offers management solutions for the modern factory by simplifying management and also support Indusoft for HMI and SCADA. Up to 8G DDR3L memory, NISE 105U have several options on storage devices like M.2, HDD and SSD. The NISE 105U support wide DC input range from 9-30VDC. The NISE 105U has high integration ability with optional mini-PCIe module and 4 x COM ports, which makes it a real intelligent system for various applications such as factory automation applications (with optional PROFIBUS®, PROFINET®, DeviceNET®, EtherCAT®, EtherNet/IP™ Master module), network applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 105U is definitely the top choice for M2M intelligent system and factory automation platforms.

Specifications

CPU Support
- Onboard Intel® Celeron® processor J1900 quad core, 2.42GHz

Main Memory
- 1 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option
- Dual independent display
  - HDMI and DVI-I
  - HDMI and VGA (via DVI-I to VGA converter)

I/O Interface-Front
- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing LEDs
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI
- 1 x USB 3.0 (900mA per each)
- 2 x USB 2.0 (500mA per each)
- 1 x DB9 for COM1 support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 1 x 2-pin DC input, support +9 to 30VDC input

I/O Interface - Rear
- 1 x Remote power on/off switch
- DVI-I display output
- 1x DB9 for COM2, support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 2 x DB9 for COM3 & COM4 support RS232 only
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G

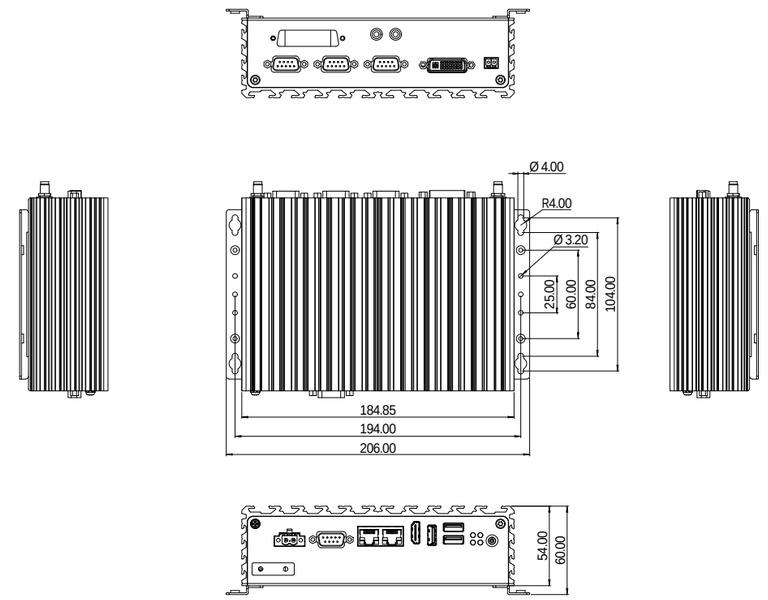
I/O Interface - Internal
- 4 x GPI and 4 GPO (5V, TTL type)

Storage Device
- 1 x M.2 support B & B+M key module
- 1 x 2.5" HDD (SATA 2.0)

Expansion Slot
- 1 x mini-PCIe socket for optional Wi-Fi/3.5G

Power Requirement
- Power input: +9VDC to +30VDC
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Support OS
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Windows Embedded Compact 7, 32-bit
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 3.8.0

Dimensions
- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Construction
- Aluminum and metal chassis with fanless design

Environment
- Operating temperature
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/HDD condition
  - Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/M.2 & SSD condition
  - Random: 2Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

Certifications
- CE
- FCC Class A

Ordering Information

- **NISE105U (P/N: 10J00010522X0)**
  Intel® Celeron® Processor J1900 Quad Core fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060032X00)**

NISE 106-N3160

Intel® Celeron® Processor N3160 Quad Core Fanless System

Main Features

- Onboard Intel® Celeron® processor N3160 Quad Core, 1.6GHz
- 3 x Display output: 1 x HDMI display + 1 x DVI-D + 1 x DP port
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0
- 2 x DB9 for RS232/422/485, 2 x DB9 for RS232
- 1 x Optional interface for optional Wi-Fi/3.5G/LTE modules
- Support -5°C~55°C extended operating temperature
- Support 9~30V DC input

Product Overview

Powered by the latest generation of Intel® Celeron® Processor N3160 Quad Core, 1.6GHz (formerly codenamed "Braswell "), NISE 106 presents intelligent PC-based controller and IOT gateway for factory automation. Up to 8G DDR3L memory, The NISE 106 support operating temperature from -5 up to 55 °C with typical DC input 9~30V. The NISE 106 has high integration ability with optional mini-PCIe module and 4 x COM ports which makes it a reliable connection with devices in factory automation applications, IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 106 is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support

- Onboard Intel® Celeron® Quad Core Processor N3160, 2M Cache, 1.6GHz

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1600 8GB RAM max., un-buffered and non-ECC

Display Option

- 1 x HDMI + 1 x DVI-D + 1 x DP display port

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing/ 4 x Tx/Rx LEDs
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI + 1x DVI-D display output
- 4 x USB 3.0 (900mA per each)
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Rear

- 1 x Display port
- 1 x SIM card holder
- 1 x External CFast socket
- 2 x DB9 for RS232/422/485 with auto flow control (COM1 and COM2)
- 2 x DB9 for RS232 (COM3 and COM4)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Remote power on/off switch
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G/LTE/NEXCOM's automation module output

I/O Interface - Internal

- 4 x GPI and 4 x GPO (5V, TTL type)

Storage Device

- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G modules

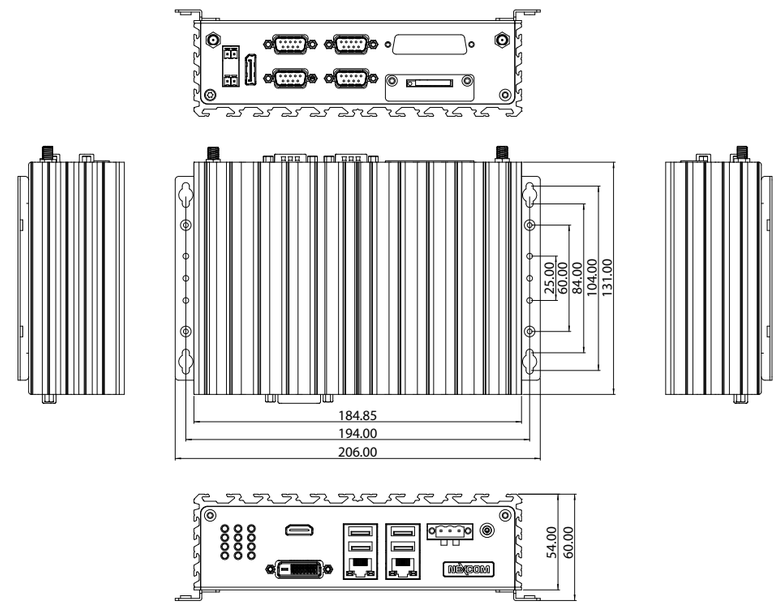
Power Requirement

- Power input: +9 to 30 Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Dimension Drawing



Construction

- Aluminum chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Support OS

- Windows 7, 64-bit only
- Windows 8.1 , 64-bit only
- Windows Embedded Standard 7 , 32-bit and 64-bit
- Windows 10 IoT Enterprise, 64-bit only
- Linux Kernel version 4.4

Ordering Information

- **NISE 106-N3160 (P/N: 10J00010603X0)**
  Intel® Celeron® Processor N3160 Quad Core, 1.6GHz fanless system
- **24V, 60W AC/DC power adapter w/o power cord**
  (P/N: 7400060033X00)

NISE 106-N3710

Intel® Pentium® Processor N3710 Quad Core Fanless System

Main Features

- Onboard Intel® Pentium® processor N3710 Quad Core, 1.6GHz
- 3 x Display output: 1 x HDMI display + 1 x DVI-D + 1 x DP port
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 3.0
- 2 x DB9 for RS232/422/485, 2 x DB9 for RS232
- 1 x Optional interface for optional Wi-Fi/3.5G/LTE modules
- Support -5°C~55°C extended operating temperature
- Support 9~30V DC input

Product Overview

Powered by the latest generation of Intel® Pentium processor N3710 Quad Core, 1.6GHz (formerly codenamed "Braswell "), NISE 106 presents intelligent PC-based controller and IOT gateway for factory automation. Up to 8G DDR3L memory, The NISE 106 support operating temperature from -5 up to 55 °C with typical DC input 9~30V. The NISE 106 has high integration ability with optional mini-PCIe module and 4 x COM ports which makes it a reliable connection with devices in factory automation applications, IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 106 is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support

- Onboard Intel® Pentium® Quad Core processor N3710, 2M Cache, 1.6GHz

Main Memory

- 1 x DDR3L SO-DIMM socket, support DDR3L 1600 8GB RAM max., un-buffered and non-ECC

Display Option

- 1 x HDMI + 1 x DVI-D + 1 x DP display port

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access/1 x battery low/1 x programing/ 4 x Tx/Rx LEDs
- 2 x Intel® I210AT GbE LAN ports; support WoL, teaming and PXE
- 1 x HDMI + 1x DVI-D display output
- 4 x USB 3.0 (900mA per each)
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Rear

- 1 x DisplayPort
- 1 x SIM card holder
- 1 x External CFast socket
- 2 x DB9 for RS232/422/485 with auto flow control (COM1 and COM2)
- 2 x DB9 for RS232 (COM3 and COM4)
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x Remote power on/off switch
- 1 x Optional I/F for optional mini-PCIe Wi-Fi/3.5G/LTE/NEXCOM's automation module output

I/O Interface - Internal

- 4 x GPI and 4 x GPO (5V, TTL type)

Storage Device

- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- 1 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G modules

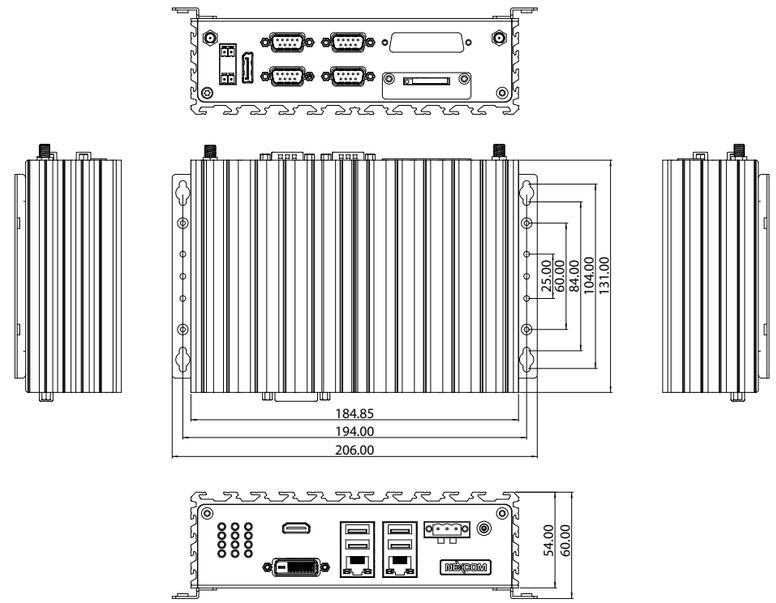
Power Requirement

- Power input: +9 to 30 Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions

- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Dimension Drawing



Construction

- Aluminum chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

Support OS

- Windows 7, 64-bit only
- Windows 8.1 , 64-bit only
- Windows Embedded Standard 7, 64-bit only
- Windows 10 IoT Enterprise, 64-bit only
- Linux Kernel version 4.4

Ordering Information

- **NISE 106-N3710 (P/N: 10J00010602X0)**
  Intel® Pentium® Processor N3710 Quad Core, 1.6GHz fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NISE 107

Intel Atom® x5-E3930 Dual Core Fanless System

Main Features

- Onboard Intel Atom® x5-E3930 Dual Core processor, 1.80 GHz
- 2 x Display output, 1 x DVI-D and 1 x DP port
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- Support both 2.5” HDD and M.2 (front access)
- 1 x mini-PCIe Wi-Fi/LTE wireless module
- 4 x USB 3.0
- 2 x DB9 for RS232/422/485
- 2 x optional DB9 for RS232 by request
- Support -20°C~70 °C extended operating temperature
- Support 9~30V DC input; support ATX power mode

Product Overview

Powered by Intel Atom® x5-E3930 processor Dual Core, 1.80 GHz (formerly codenamed "Apollo Lake "), NISE 107 presents IoT gateway for factory automation. Up to 8G DDR3L memory, the NISE 107 supports operating temperature from -20 up to 70 degree C with typical DC input 9~30V. The NISE107 has high integration ability with 2 x COM ports (RS232/422/485), optional mini-PCIe module and 2 x optional COM ports (RS232) which makes it a reliable connection with devices in factory automation applications, IoT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 107 is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support
- Onboard Intel Atom® x5-E3930 Dual Core processor, 1.80 GHz, 2M Cache

Main Memory
- 1 x DDR3L SO-DIMM socket, support DDR3L 1866 8GB RAM max., un-buffered and non-ECC

Display Option
- Dual independent display: DVI-D + DP

I/O Interface-Front
- ATX power on/off switch
- LED indicator: power status, HDD access, RTC battery low, Tx/Rx, GPO programmable LEDs
- 2 x DB9 for RS232/422/485 with auto flow control
- 1 x External M.2 socket support B, B+M key module
- 1 x SIM card holder
- 1 x Optional I/F opening for optional function output or module interface use

I/O Interface-Rear
- 1 x Display port
- 1 x DVI-D port
- 4 x USB 3.0 ports (900mA per each)
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna
- 1 x 3-pin DC input, support +9 to 30VDC input
- 1 x 3-pin remote power on/off switch

I/O Interface - Internal
- 4 x GPI and 4 x GPO (5V, TTL type)

Storage Device
- 1 x 2.5" HDD (SATA 3.0)
- 1 x M.2, support B, B+M key module

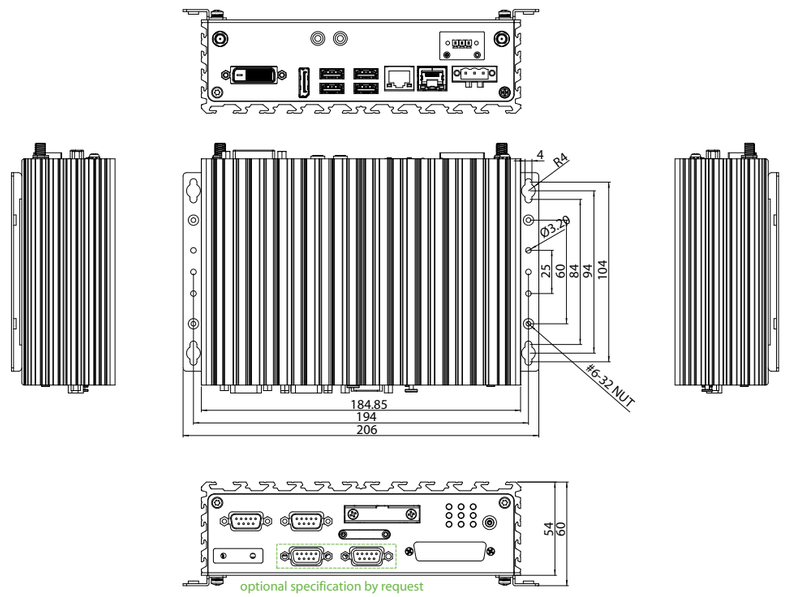
Expansion Slot
- 1 x mini-PCIe socket support optional Wi-Fi/4G LTE/3.5G modules

Power Requirements
- Power input: +9 to 30 Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions
- 185mm (W) x 131mm (D) x 54mm (H) without wall-mount bracket

Construction
- Aluminum chassis with fanless design

Dimension Drawing



Environment
- Operating temperature:
  Ambient with air flow: -20°C to 70°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 95% at 40°C
- Shock protection:
  - HDD: 20G @ wall mount, half sine, 11ms(operation), IEC60068 2-27
  - M.2: 50G @ wall mount, half sine, 11ms(operation) , IEC60068 2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ M.2 & SSD condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A

Support OS
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 4.1

Ordering Information

- **NISE 107 (P/N: 10J00010701X0)**
  Intel Atom® x5-E3930 Dual Core, 1.80GHz fanless system
- **NISE 107-E3940 (P/N: 10J00010700X0)**
  Intel Atom® x5-E3940 Quad Core, 1.80GHz fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NISE 107-POE

Intel Atom® x5-E3940 Quad Core Fanless System

Main Features

- Onboard Intel Atom® x5-E3940 Quad Core processor, 1.80 GHz
- 2 x Display output, 1 x DVI-D and 1 x DP port
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE, LAN1 with PoE function (802.3af compliance)
- Support both 2.5" HDD and M.2 (front access)
- 1 x mini-PCIe slot support Wi-Fi/LTE wireless module
- 4 x USB 3.0
- 2 x DB9 for RS232/422/485
- 2 x DB9 for RS232
- Support -5~55 degree C operating temperature
- Support 9~30V DC input; support ATX power mode

Product Overview

Powered by the latest generation of Intel Atom® x5-E3940 processor Quad Core, 1.80 GHz (formerly codenamed "Apollo Lake "), NISE 107-POE presents IoT gateway for factory automation. Up to 8G DDR3L memory, the NISE 107-POE supports operating temperature from -5 up to 55 degree C with typical DC input 9~30V. The NISE 107-POE has high integration ability with 4 x COM ports (2x RS232/422/485 + 2x RS232) and optional mini-PCIe module which makes it a reliable connection with devices in factory automation applications, IoT applications (with optional GbE LAN, Wi-Fi, 3.5G, LTE module) and communication applications (with optional GPIO, RS232/422/485). NISE 107-POE offers a PoE port to power a device such as IP camera, sensor, machine vision systems…etc. and a GbE port for data communication. NISE 107-POE is definitely the top choice for M2M intelligent system as a factory automation controller and gateway.

Specifications

CPU Support
- Onboard Intel Atom® x5-E3940 Quad Core processor, 1.80 GHz, 2M Cache

Main Memory
- 1 x DDR3L SO-DIMM socket, support DDR3L 1866 8GB RAM max., un-buffered and non-ECC

Display Option
- Dual independent display: DVI-D + DP

I/O Interface-Front
- ATX power on/off switch
- LED indicator: power status, HDD access, RTC battery low, Tx/Rx, GPO programmable LEDs
- 2 x DB9 for RS232/422/485 with auto flow control
- 2 x DB9 for RS232
- 1 x External M.2 socket support B, B+M key module
- 1 x SIM card holder
- 1 x Optional I/F opening for optional function output or module interface use

I/O Interface-Rear
- 1 x Display port
- 1 x DVI-D port
- 4 x USB 3.0 ports (900mA per each)
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE, LAN1 with PoE function (802.3af compliance)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes for optional Wi-Fi/3.5G/LTE antenna
- 1 x 3-pin DC input, support +9 to 30VDC input
- 1 x 3-pin remote power on/off switch

I/O Interface - Internal
- 4 x GPI and 4 x GPO (5V, TTL type)

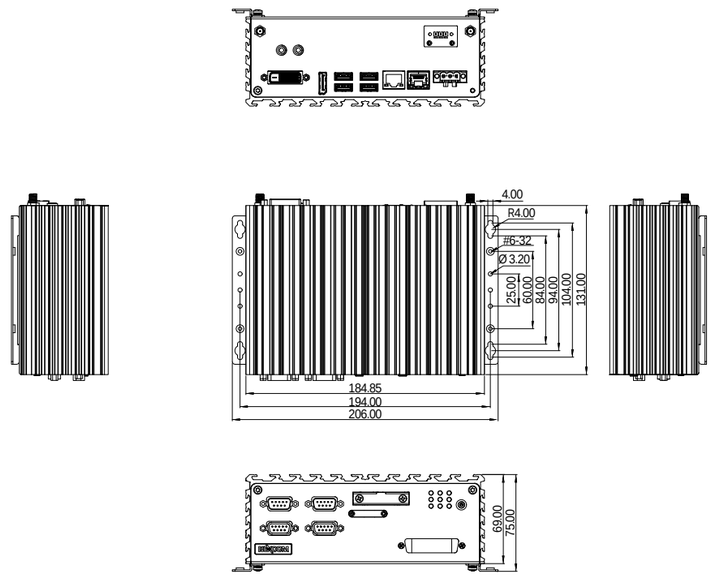
Storage Device
- 1 x 2.5" HDD (SATA 3.0)
- 1 x M.2, support B, B+M key module

Expansion Slot
- 1 x mini-PCIe socket support optional Wi-Fi/4G LTE/3.5G modules

Power Requirements
- Power input: +9 to 30 Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions
- 185mm (W) x 131mm (D) x 69mm (H) without wall-mount bracket

Dimension Drawing



Construction
- Aluminum chassis with fanless design

Environment
- Operating temperature
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 95% at 40°C
- Shock protection
  - HDD: 20G @ wall mount, half sine, 11ms (operation), IEC60068 2-27
  - M.2: 50G @ wall mount, half sine, 11ms (operation), IEC60068 2-27
- Vibration protection w/ HDD condition
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection w/ M.2 & SSD condition
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications
- CE approval
  - EN61000-6-2
  - EN61000-6-4
- FCC Class A

Support OS
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 4.1

Ordering Information

- **NISE 107-POE (P/N: 10J00010702X0)**
  Intel Atom® x5-E3940 Quad Core, 1.80GHz fanless system
- **24V, 60W AC/DC power adapter w/o power cord (P/N: 7400060033X00)**

NISE 2400

Intel® Atom™ Processor E3827 Dual Core Fanless System

Main Features

- Onboard Intel® Atom™ processor E3827 Dual Core, 1.75GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0 & 1 x USB 3.0
- 2 x RS232 & 2 x RS232/RS422/RS485 with auto flow control
- 2 x mini-PCIe socket for optional mSATA/Wi-Fi/4G LTE/3.5G/Fieldbus modules
- Support -20 to 70 degree Celus extended operating temperature
- Support 9-30V DC input

Product Overview

Powered by Intel® Atom™ Bay Trail Dual Core processor E3827, 1.75GHz. Driven by the latest Dual Core Intel® Atom™ processor, NISE 2400 can provide excellent computing power and is more power-efficient than the platforms based on the previous generation Intel® Atom™ product family.

NISE 2400 supports up to 8G DDR3L memory and have several options on storage devices like CFast, HDD, SSD or mSATA . The NISE2400 comes with 1 x HDMI, 1 x DVI-I, 2 x GbE LAN ports, 2x COM port with RS232/422/485 and 5x USB ports including one USB 3.0. NISE 2400 supports 9~30V DC input, and can be operated in an extended operating temperature range from -20 to 70 degrees Celsius. This Fanless system supports two mini-PCIe modules, which can be an excellent platform for IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and factory automation applications with optional fieldbus module. Its expansion versatility makes NISE 2400 a perfect platform for factory automation and M2M intelligent computing applications.

Specifications

CPU Support

- Onboard Intel® Atom™ processor E3827 Dual Core, 1.75GHz
- Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - HDMI and DVI-I
  - HDMI and VGA (via DVI-I connector)

Front I/O Interface

- ATX power on/off switch
- 1 x Power status, 1 x HDD access, 1 x battery low, 4 x programming LEDs, 4 x Tx/Rx LEDs, 2 x LAN LEDs
- 2 x DB9 RS232 for COM3 & COM4
- 1 x External CFast socket
- 1 x SIM card holder
- 1 x USB 3.0 (900mA per each)
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface - Rear

- 4 x USB 2.0
- 1 x DVI-I display output
- 1 x HDMI display output
- 1 x Remote power on/off switch
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL Type)

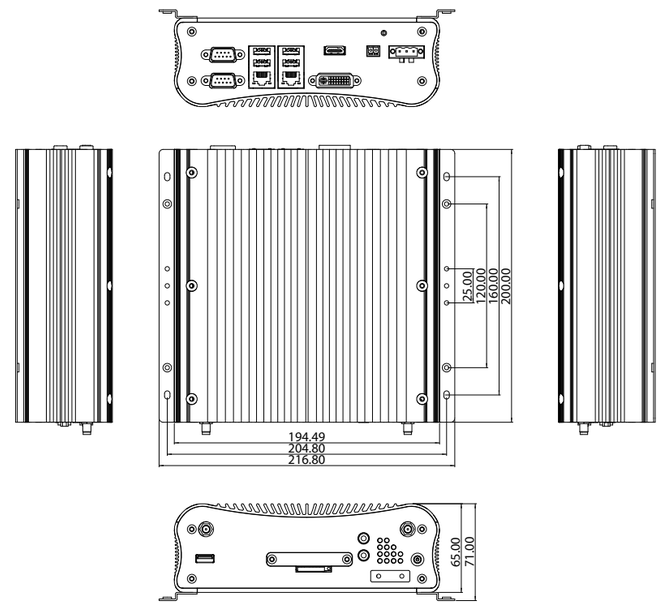
Storage Device

- 1 x CFast card socket (SATA 2.0)
- 1 x 2.5" HDD space (SATA 2.0)
- 1 x mSATA from mini-PCIe socket if SATA HDD is not installed

Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G

Dimension Drawing



Power Requirement

- Power input: +9Vdc to +30Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions

- 191mm (W) x 200mm (D) x 60mm (H) without wall-mount bracket

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 70°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  HDD: 20G, half sine, 11ms, IEC60068-2-27
  CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  Random: 2Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

OS Support Lists

- Windows 8, 32-bit/64-bit
- Windows Embedded Standard 8, 32-bt/64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Ordering Information

Barebone

- **NISE 2400 (P/N:10J00240000X0)**

  Onboard Intel® Atom™ processor E3827 Dual Core, 1.75GHz

- **24V 60W AC/DC power adapter w/o power cord (P/N: 7400060024X00)**

NISE 2400-J1900

Intel® Celeron® Processor J1900 Quad Core Fanless System

Main Features

- Onboard Intel® Celeron® Processor J1900 Quad Core, 2.0GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0 & 1 x USB 3.0
- 2 x RS232 & 2 x RS232/RS422/RS485 with auto flow control
- 2 x mini-PCIe socket for optional mSATA/Wi-Fi/4G LTE/3.5G/Fieldbus modules
- Support -5 to 55 degree Celus extended operating temperature
- Support 9-30V DC input

Product Overview

Powered by Intel® Celeron® Processor J1900 Quad Core, 2.0GHz. Driven by the latest Quad Core Intel® Celeron® Processor, NIE2400-J1900 can provide excellent computing power and is more power-efficient than the platforms based on the previous generation Intel® Celeron® product family.

NISE2400-J900 supports up to 8G DDR3L memory and have several options on storage devices like CFast, HDD, SSD or mSATA . The NISE2400-J900 comes with 1 x HDMI, 1 x DVI-I, 2 x GbE LAN ports, 2x COM port with RS232/422/485 and 5x USB ports including one USB 3.0. NISE2400-J900 supports 9~30V DC input, and can be operated in an extended operating temperature range from -5 to 55 degrees Celsius. This Fanless system supports two mini-PCIe modules, which can be an excellent platform for IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and factory automation applications with optional fieldbus module. Its expansion versatility makes NISE2400-J900 a perfect platform for factory automation and M2M intelligent computing applications.

Specifications

CPU Support

- Onboard Intel® Celeron® Processor J1900 Quad Core, 2.0GHz
- Support Intel® Atom™ E3800 processor family from single core E3815, dual core E3825/E3826/E3827 and quad core E3845 with difference SKUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - HDMI and DVI-I
  - HDMI and VGA (via DVI-I connector)

Front I/O Interface

- ATX power on/off switch
- 1 x Power status, 1 x HDD access, 1 x battery low, 4 x programming LEDs, 4 x Tx/Rx LEDs, 2 x LAN LEDs
- 2 x DB9 RS232 for COM3 & COM4
- 1 x External CFast socket
- 1 x SIM card holder
- 1 x USB 3.0 (900mA per each)
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface - Rear

- 4 x USB 2.0
- 1 x DVI-I display output
- 1 x HDMI display output
- 1 x Remote power on/off switch
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

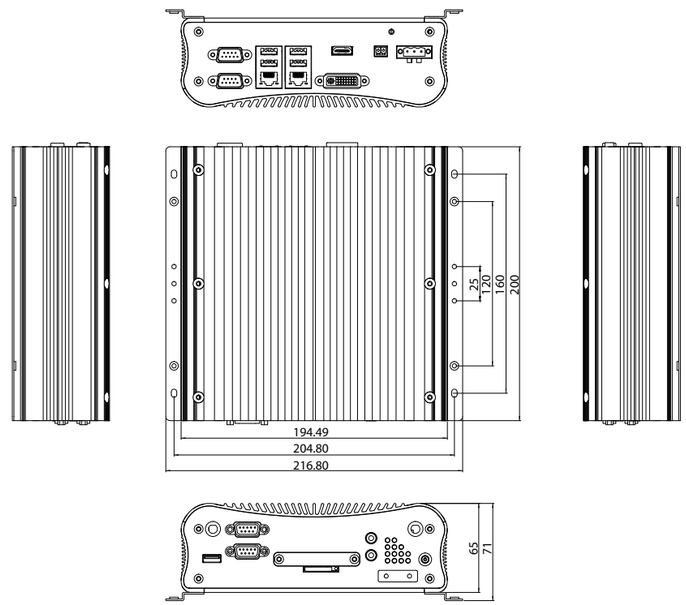
Storage Device

- 1 x CFast card socket (SATA 2.0)
- 1 x 2.5" HDD space (SATA 2.0)
- 1 x mSATA from mini-PCIe socket if SATA HDD is not installed

Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G

Dimension Drawing



Power Requirement

- Power input: +9Vdc to +30Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions

- 191mm (W) x 200mm (D) x 60mm (H) without wall-mount bracket

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  HDD: 20G, half sine, 11ms, IEC60068-2-27
  CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  Random: 2Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

OS Support Lists

- Windows 8, 32-bit/64-bit
- Windows Embedded Standard 8, 32-bt/64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Windows 10 IoT Enterprise, 64-bit
- Linux Kernel version 3.8.0

Ordering Information

Barebone

- **NISE 2400-J1900 (P/N:10J00240002X0)**
  Onboard Intel® Celeron® Processor J1900 Quad Core, 2.0GHz
- **24V 60W AC/DC power adapter w/o power cord (P/N: 7400060024X00)**

NISE 2410/2410E

Intel® Atom™ Processor E3827 Dual Core Fanless System

Main Features

- Onboard Intel® Atom™ processor E3827 Dual Core, 1.75GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0 & 1 x USB 3.0
- 2 x mini-PCIe socket for optional mSATA/Wi-Fi/4G LTE/3.5G
- 2 x RS232 & 2 x RS232/RS422/RS485 with auto flow control
- Support -20~70 degree Celus extended operating temperature
- Support 9-30V DC input

Product Overview

Powered by Intel® Atom™ Bay Trail Dual Core processor E3827, 1.75GHz. Driven by the latest Dual Core Intel® Atom™ processor, NISE 2410/2410E can provide excellent computing power and is more power-efficient than the platforms based on the previous generation Intel® Atom™ product family.

NISE 2410/2410E supports up to 8G DDR3L memory and have several options on storage devices like CFast, HDD, SSD or mSATA. The NISE 2410/2410E comes with 1 x HDMI, 1 x DVI-I, 2 x GbE LAN ports, 2x COM port with RS232/422/485 and 5x USB ports including one USB 3.0. NISE 2410/2410E supports 9~30V DC input, and can be operated in an extended operating temperature range from -20 to 70 degrees Celsius. This Fanless system supports two mini-PCIe modules, which can be an excellent platform for IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and factory automation applications with optional fieldbus module. Its expansion versatility makes NISE 2400 a perfect platform for factory automation and M2M intelligent computing applications.

Specifications

CPU Support

- Onboard Intel® Atom™ E3800 processor family
  - E3827 Dual Core, 1.75GHz for NISE 2410
  - E3845 Quadl Core, 1.91GHz for NISE 2410E
- Support Intel® Atom™ E3800 processor family from single core E3815, dual core E3825/E3826/E3827 and quad core E3845 with differenceS KUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - HDMI and DVI-I
  - HDMI and VGA (via DVI-I connector)

Front I/O Interface

- ATX power on/off switch
- 1 x Power status, 1 x HDD access, 1 x battery low, 4 x programming LEDs, 4 x Tx/Rx LEDs, 2 x LAN LEDs
- 2 x DB9 RS232 for COM3 & COM4
- 1 x External CFast socket
- 1 x SIM card holder
- 1 x USB 3.0 (900mA per each)
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface - Rear

- 4 x USB 2.0
- 1 x DVI-I display output
- 1 x HDMI display output
- 1 x Remote power on/off switch
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

Storage Device

- 1 x CFast card socket (SATA 2.0)
- 1 x 2.5" HDD space (SATA 2.0)
- 1 x mSATA from mini-PCIe socket if SATA HDD is not installed

Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G
- NISE 2410: one PCI Expansion
  - Add-on card length: 176mm max.
  - Power consumption: 10W/slot max.
- NISE 2410E: one PCIe x4 Expansion (only support PCIex1 speed & signal)
  - Add-on card length: 176mm max.
  - Power consumption: 10W/slot max.

Power Requirement

- Power input: +9Vdc to +30Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions

- 195mm (W) x 200mm (D) x 90mm (H) without wall-mount bracket

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 70°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  HDD: 20G, half sine, 11ms, IEC60068-2-27
  CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  Random: 2Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

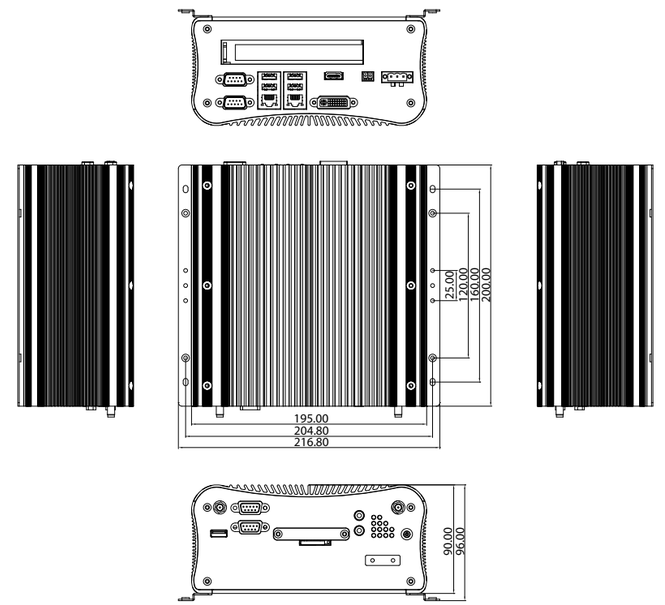
Certifications

- CE
- FCC Class A

OS Support Lists

- Windows 8, 32-bit/64-bit
- Windows Embedded Standard 8, 32-bt/64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Dimension Drawing



Ordering Information

- **NISE 2410 (P/N: 10J00241000X0)**
  Onboard Intel® Atom™ processor E3827 Dual Core, 1.75GHz with one PCI expansion
- **NISE 2410E (P/N: 10J00241001X0)**
  Onboard Intel® Atom™ processor E3845 Quad Core, 1.91GHz with one PCIe x1 expansion
- **24V 60W AC/DC power adapter w/o power cord (P/N: 7400060024X00)**

NISE 2410-J1900

Intel® Celeron® Processor J1900 Quad Core Fanless System

Main Features

- Onboard Intel® Celeron® Processor J1900 Quad Core, 2.0GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 4 x USB 2.0 & 1 x USB 3.0
- 2 x mini-PCIe socket for optional mSATA/Wi-Fi/4G LTE/3.5G
- 2 x RS232 & 2 x RS232/RS422/RS485 with auto flow control
- Support -5~55 degree Celus extended operating temperature
- Support 9-30V DC input

Product Overview

Powered by Intel® Celeron® Processor J1900 Quad Core, 2.0GHz. Driven by the latest Quad Core Intel® Celeron® Processor, NISE2410-J1900 can provide excellent computing power and is more power-efficient than the platforms based on the previous generation Intel® Atom™ product family.

NISE2410-J1900 supports up to 8G DDR3L memory and have several options on storage devices like CFast, HDD, SSD or mSATA. The NISE2410-J1900 comes with 1 x HDMI, 1 x DVI-I, 2 x GbE LAN ports, 2x COM port with RS232/422/485 and 5x USB ports including one USB 3.0. NISE2410-J1900 supports 9~30V DC input, and can be operated in an extended operating temperature range from -5 to 55 degrees Celsius. This Fanless system supports two mini-PCIe modules, which can be an excellent platform for IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and factory automation applications with optional fieldbus module. Its expansion versatility makes NISE2410-J1900 a perfect platform for factory automation and M2M intelligent computing applications.

Specifications

CPU Support

- Onboard Intel® Celeron® processor J1900 Quad Core, 2.0GHz
- Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with differenceS KUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - HDMI and DVI-I
  - HDMI and VGA (via DVI-I connector)

Front I/O Interface

- ATX power on/off switch
- 1 x Power status, 1 x HDD access, 1 x battery low, 4 x programming LEDs, 4 x Tx/Rx LEDs, 2 x LAN LEDs
- 2 x DB9 RS232 for COM3 & COM4
- 1 x External CFast socket
- 1 x SIM card holder
- 1 x USB 3.0 (900mA per each)
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface - Rear

- 4 x USB 2.0
- 1 x DVI-I display output
- 1 x HDMI display output
- 1 x Remote power on/off switch
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

Storage Device

- 1 x CFast card socket (SATA 2.0)
- 1 x 2.5" HDD space (SATA 2.0)
- 1 x mSATA from mini-PCIe socket if SATA HDD is not installed

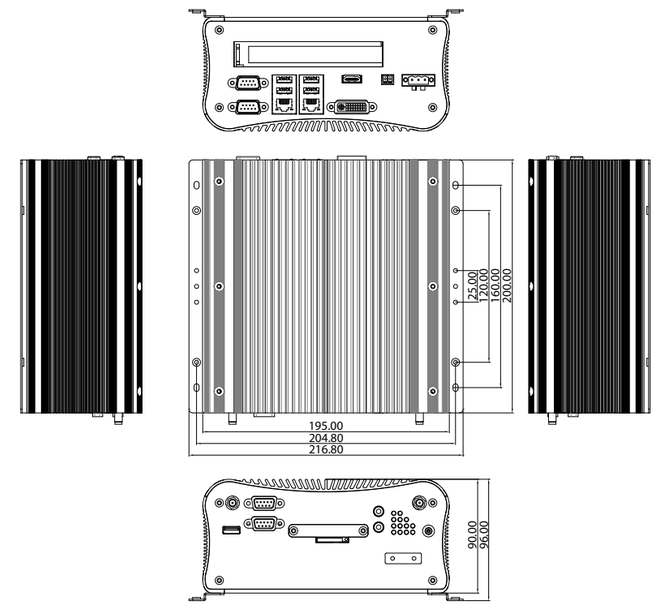
Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G
- NISE2410-J1900: one PCI Expansion

Power Requirement

- Power input: +9Vdc to +30Vdc
- 1 x Optional 24V, 60W power adapter

Dimension Drawing



Dimensions

- 195mm (W) x 200mm (D) x 90mm (H) without wall-mount bracket

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  HDD: 20G, half sine, 11ms, IEC60068-2-27
  CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  Random: 2Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

Certifications

- CE
- FCC Class A

OS Support Lists

- Windows 8, 32-bit/64-bit
- Windows Embedded Standard 8, 32-bt/64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Ordering Information

- **NISE2410-J1900 (P/N: 10J00241002X0)**
  Onboard Intel® Celeron® Processor J1900 Quad Core, 2.0GHz with one PCI expansion
- **24V 60W AC/DC power adapter w/o power cord**
  (P/N: 7400060024X00)

NISE 2420

Intel® Atom™ Processor E3845 Quad Core Fanless System

Main Features

- Onboard Intel® Atom™ processor E3845 Quad core, 1.91GHz
- Dual independent display from DVI-I and HDMI
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 2 x RS232 & 2 x RS232/RS422/RS485 with auto flow control
- 4 x USB 2.0 & 1 x USB 3.0
- 2 x mini-PCIe socket for optional mSATA/Wi-Fi/4G LTE/3.5G
- Support -20 to 70 degree Celus extended operating temperature
- Support 9-30V DC input

Product Overview

Powered by Intel® Atom™ Bay Trail Quad core processor E3845, 1.91GHz. Driven by the latest Dual Core Intel® Atom™ processor, NISE 2420 can provide excellent computing power and is more power-efficient than the platforms based on the previous generation Intel® Atom™ product family.

NISE 2420 supports up to 8G DDR3L memory and have several options on storage devices like CFast, HDD, SSD or mSATA . The NISE 2420 comes with 1 x HDMI, 1 x DVI-I, 2 x GbE LAN ports, 2x COM port with RS232/422/485 and 5x USB ports including one USB 3.0. NISE 2420 supports 9~30V DC input, and can be operated in an extended operating temperature range from -20 to 70 degrees Celsius. This Fanless system supports two mini-PCIe modules, Which can be an excellent platform for IOT applications (with optional GbE LAN, Wi-Fi, 3.5G/4G LTE module) and factory automation applications with optional fieldbus module expansion versatility makes NISE 2420 a perfect platform for factory automation and M2M intelligent computing applications.

Specifications

CPU Support

- Onboard Intel® Atom™ E3845 Quad core, 1.91GHz
- Support Intel® Atom™ E3800 processor family from Single Core E3815, Dual Core E3825/E3826/E3827 and Quad Core E3845 with difference SKUs

Main Memory

- 2 x DDR3L SO-DIMM socket, support DDR3L 1066/1333 8GB RAM max., un-buffered and non-ECC

Display Option

- Dual independent display
  - HDMI and DVI-I
  - HDMI and VGA (via DVI-I connector)

Front I/O Interface

- ATX power on/off switch
- 1 x Power status, 1 x HDD access, 1 x battery low, 4 x programming LEDs, 4 x Tx/Rx LEDs, 2 x LAN LEDs
- 2 x DB9 RS232 for COM3 & COM4
- 1 x External CFast socket
- 1 x SIM card holder
- 1 x USB 3.0 (900mA Max.)
- 1 x Mic-in & 1 x Line-out
- 2 x Antenna holes for optional Wi-Fi/3.5G antenna

I/O Interface - Rear

- 4 x USB 2.0
- 1 x DVI-I display output
- 1 x HDMI display output
- 1 x Remote power on/off switch
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 2 x DB9 for COM1 & COM2, both support RS232/422/485 with auto flow control
  - Jumper-free setting on RS232/422/485
- 1 x 3-pin DC input, support +9 to 30VDC input

I/O Interface - Internal

- 4 x GPI and 4 GPO (5V, TTL type)

Storage Device

- 1 x CFast card socket (SATA 2.0)
- 1 x 2.5" HDD space (SATA 2.0)
- 1 x mSATA from mini-PCIe socket if SATA HDD is not installed

Expansion Slot

- 2 x mini-PCIe socket for optional Wi-Fi/4G LTE/3.5G
- NISE 2420: two PCI Expansion
  - Add-on card length: 176mm max.
  - Power consumption: 10W/slot max.

Power Requirement

- Power input: +9Vdc to +30Vdc
- 1 x Optional 24V, 60W power adapter

Dimensions

- 195mm (W) x 200mm (D) x 111mm (H) without wall-mount bracket

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 70°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -30°C to 85°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  HDD: 20G, half sine, 11ms, IEC60068-2-27
  CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6
- Vibration protection w/ CFast & SSD condition:
  Random: 2Grms @ 5~500Hz, IEC60068-2-64
  Sinusoidal: 2Grms @ 5~500Hz, IEC60068-2-6

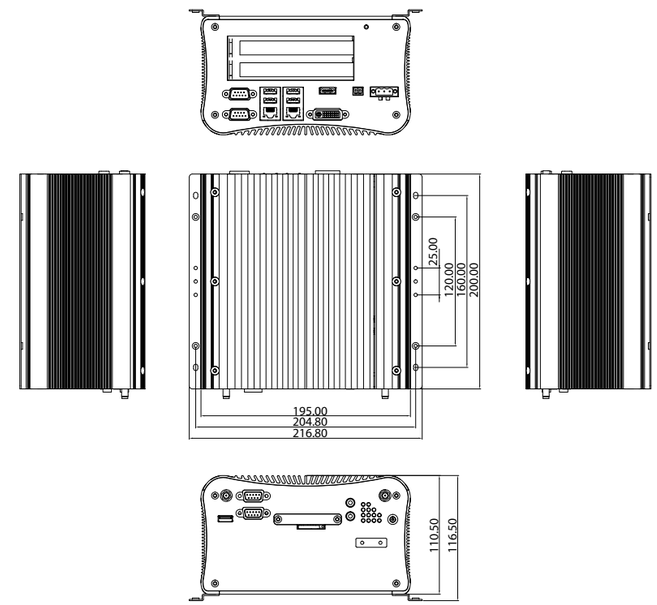
Certifications

- CE
- FCC Class A

OS Support Lists

- Windows 8, 32-bit/64-bit
- Windows Embedded Standard 8, 32-bt/64-bit
- Windows 7, 32-bit/64-bit
- Windows Embedded Standard 7, 32-bit/64-bit
- Linux Kernel version 3.8.0

Dimension Drawing



Ordering Information

- **NISE 2420 (P/N: 10J00242000X0)**
  Onboard Intel® Atom™ processor E3845 Quad core, 1.91GHz with two PCI expansion
- **24V 60W AC/DC power adapter w/o power cord**
  (P/N: 7400060024X00)

NISE 3700E

4th Generation Intel® Core™ i7/i5/i3
LGA Fanless System with Expansion

Main Features

- Support 4th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q87 PCH
- Support 1 x 2.5" SATA HDD
- 1 x DVI-I, 1 x DVI-D, and 1 x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 1 x External CFast socket and 1x SIM card socket
- 4 x USB 3.0, 4 x USB 2.0, 1 x RS232 and 2 x RS232/422/485 with auto flow control
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus
- Support +9V to 30VDC input; ATX power mode
- 1 x PCIe x4 expansion

Product Overview

Integrated with 4th generation Intel® Core™ i7/i5/i3 processors, NISE 3700 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3700 supports up to 8G DDR3 or DDR3L memory and have several options on storage devices like CFast, HDD, mSATA or SSD. NISE 3700 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3700 also designed two internal mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 4th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-4770TE, Quad Core, 2.3GHz, 8M Cache, Max Turbo Frequency 3.3 GHz
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache, Max Turbo Frequency 3.0 GHz
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR3/DDR3L SO-DIMM socket, support up to 8GB with un-buffered and non-ECC

Display Option

- Three independent display
  - HDMI + DVI-I + DVI-D
- Dual independent display
  - HDMI + DVI-I
  - HDMI + DVI-D
  - DVI-I + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs/1 x CFast access LEDs
- 3 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

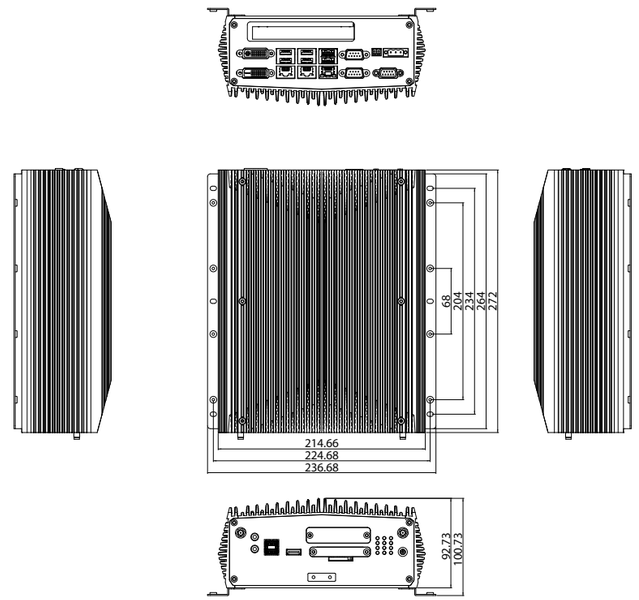
Front I/O Interface

- 1 x ATX power on/off switch
- 1 x HDMI
- 2 x USB 3.0 ports (900mA per each)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External CFast socket
- 1 x SIM card holder

Rear I/O Interface

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
  - COM3: RS232
- 2 x USB 3.0 ports (900mA per each)
- 4 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x DVI-I port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switch
- +9V to 30 V DC input

Dimension Drawing



Storage Device

- 1 x CFast (SATA 3.0)
- 1 x 2.5" HDD (SATA 3.0)
- 1 x mSATA (internal mini-PCIe socket)

Expansion Slot

- One PCIe x4 expansion slot
  - Add-on card length: 169mm max.
  - Power consumption: 10W/slot max.
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus

Power Requirement

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 93mm (H) without wall mount bracket (8.5" x 10.7" x 3.7")

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval
- FCC Class B

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 8.1 32-bit and 64-bit

Weight Information

- Gross weight: 5.9kg
- Net weight: 4.5kg

Ordering Information

- **NISE 3700E System (P/N: 10J00370000X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with one PCIe x4 expansion
- **NISE 3700E2 System (P/N: 10J00370001X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with two PCIe x4 expansions
- **NISE 3700P2 System (P/N: 10J00370002X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with two PCI expansions
- **NISE 3700P2E System (P/N: 10J00370003X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with one PCI and one PCIe x4 expansion
- **24V, 120W AC to DC power adapter w/o power cord**
  (P/N: 7400120015X00)

NISE 3700E2/P2/P2E

4th Generation Intel® Core™ i7/i5/i3 LGA
Fanless System with Expansion

Main Features

- Support 4th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q87 PCH
- Support 1 x 2.5" SATA HDD
- 1 x DVI-I, 1 x DVI-D, and 1 x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 1 x External CFast socket and 1 x SIM card socket
- 4 x USB 3.0, 4 x USB 2.0, 1 x RS232 and 2 x RS232/422/485 with auto flow control
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus
- Support +9V to 30VDC input; ATX power mode
- 2 x PCI or PCIe x4 expansions

Product Overview

Integrated with 4th generation Intel® Core™ i7/i5/i3 processors, NISE 3700 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3700 supports up to 8G DDR3 or DDR3L memory and have several options on storage devices like CFast, HDD, mSATA or SSD. NISE 3700 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3700 also designed two internal mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 4th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-4770TE, Quad Core, 2.3GHz, 8M Cache, Max Turbo Frequency 3.3 GHz
  - Core™ i5-4590T, Quad Core, 2.0GHz, 6M Cache, Max Turbo Frequency 3.0 GHz
  - Core™ i3-4350T, Dual Core, 3.1GHz, 4M Cache
  - Pentium® G3320TE, Dual Core, 2.3GHz, 3M Cache
  - Celeron® G1820TE, Dual Core, 2.2GHz, 2M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR3/DDR3L SO-DIMM socket, support up to 8GB with un-buffered and non-ECC

Display Option

- Three independent display
  - HDMI + DVI-I + DVI-D
- Dual independent display
  - HDMI + DVI-I
  - HDMI + DVI-D
  - DVI-I + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs/1x CFast access LEDs
- 3 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x HDMI
- 2 x USB 3.0 ports (900mA per each)
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External CFast socket
- 1 x SIM card holder

Rear I/O Interface

- 3 x DB9 for COM1 & COM2 & COM3
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
  - COM3: RS232
- 2 x USB 3.0 ports (900mA per each)
- 4 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x DVI-I port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switch
- +9V to 30V DC input

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x 2.5" HDD (SATA 3.0)
- 1 x mSATA (internal mini-PCIe socket)

Expansion Slot

- NISE 3700E2: two PCIe x4 expansion slots
  - Add-on card length: one 169mm max, and one 240mm max.
  - Power consumption: 10W/slot max
- NISE 3700P2: two PCI expansion slots
  - Add-on card length: one 169mm max, and one 240mm max.
  - Power consumption: 10W/slot max
- NISE 3700P2E: one PCIe x4 and one PCI expansion slot
  - Add-on card length: one 169mm max for PCIe x4, and one 240mm max for PCI
  - Power consumption: 10W/slot max
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus

Power Requirement

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 114mm (H) without wall mount bracket (8.5" x 10.7" x 4.5")

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval
- FCC Class B

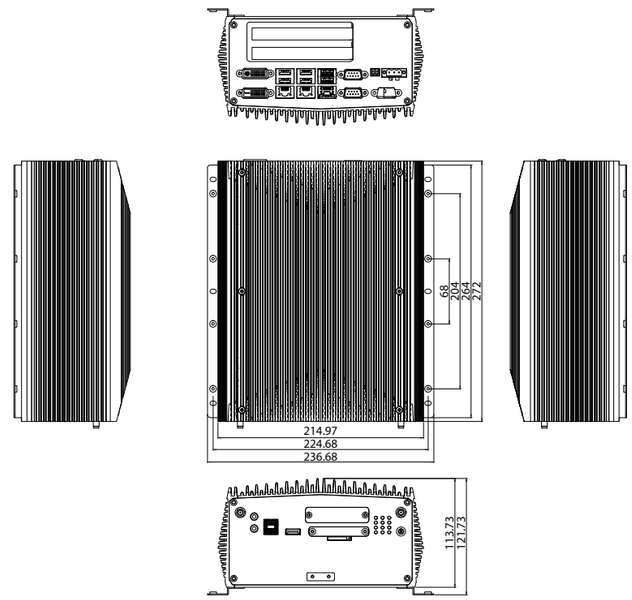
OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 8.1 32-bit and 64-bit

Weight Information

- Gross weight: 6.4kg
- Net weight: 5.0kg

Dimension Drawing



Ordering Information

- **NISE 3700E System (P/N: 10J00370000X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with one PCIe x4 expansion
- **NISE 3700E2 System (P/N: 10J00370001X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with two PCIe x4 expansions
- **NISE 3700P2 System (P/N: 10J00370002X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with two PCI expansions
- **NISE 3700P2E System (P/N: 10J00370003X0)**
  4th generation Intel® Core™ i7/i5/i3 fanless system with one PCI and one PCIe x4 expansion
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120015X00)**

NISE 3720E

Intel® Core™ i7 Fanless System
with mSATA, mini-PCIe, and One Expansion Slot

Main Features

- Support both Intel® 5th generation i7/i5/i3 processors with U platform, Dual Core with HD graphical power
- 1 x DVI-I, 1 x DVI-D with three independent display support
- 2 x Intel® GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 3.0 & 2 x USB 2.0
- 2 x RS232/422/485 with auto flow control
- 1 x CFast socket
- 1 x Internal mini-PCIe socket support optional mSATA or Fieldbus module (by jumper switch)
- 1 x Internal mini-PCIe socket support optional Wi-Fi or 3.5G (auto detection)
- Support external RTC battery holder
- Support 24V DC input

Product Overview

With the 5th generation Intel® Core™ BGA processor, NISE 3720 immediately becomes a remarkable model in the NISE family line. By comparing to the previous Ivy-Bridge mobile platform, the 5th generation mobile platform increases computing power up to 10%, and the graphical performance also increases up to 30% with Intel® HD graphics 6000. The mobile processor features ultra low power consumption (15W), and the NISE 3720 system is housing in a ruggedized design with aluminum chassis. This combination allows NISE 3720 to offer great computing/graphical power and able to run from -20 to 60 Celsius Degree.

NISE 3720 supports up to 8G DDR3L memory and provides SATAIII/CFast interfaces for storage expansions. For network connectivity, NISE 3720 supports 2x Intel® I210-IT LAN ports onboard for dual network teaming functions. For power input range, NISE 3720 supports +24V DC Input with +/- 20% and this is significant design improvement for allowing more voltage fluctuation of DC power source.

In addition of the design improvement, NISE3720 is designed to support PCI, PCIex4 and 2x mini-PCIe for more interface expansions. For the 2x mini-PCIe, it can install either fieldbus interfaces (PROFIBUS®, PROFINET®, DeviceNet®, EtherCAT®, and EtherNet/IP™) for automation applications, or 3G/ Wi-Fi/GSM/LTE interface for building up IoT applications. For the PCI/PCIex4 expansion, the user can adapt suitable PCI and PCIex4 cards for their project needs.

With such rich expansions, the users can easily transform this reliable general purpose PC and set it ready for any specific markets.

Specifications

CPU Support

- Onboard BGA type CPU is Core™ i7-5650U, Dual Core, 2.2GHz, 4M Cache, Max Turbo Frequency 3.1 GHz
- Onboard BGA type CPU is Core™ i7-4650U, Dual Core, 1.7GHz, 4M Cache, Max Turbo Frequency 3.3 GHz
- Support following onboard BGA type processors by project base
  - 5th generation Intel® core™ i5/i3/Celeron® MCP processors
  - Core™ i5-5350U, Dual core, 1.8GHz, 3M Cache, Max Turbo Frequency 2.9 GHz
  - Core™ i3-5010U, Dual core, 2.1GHz, 3M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR3L SO-DIMM socket, support up to 8GB DDR3L 1333/1600 RAM, un-buffered and non-ECC

Display Option

- Support dual independent display
  - DVI-I (DVI-D + VGA)
  - DVI-D

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access LEDs
- 2 x LAN status/1 x CFast LEDs
- 3 x Programmable GPO/1 x battery low LEDs
- 2 x USB 2.0 ports (500mA per each)
- 1 x External CFast socket
- 1 x SIM card holder
- 1 x External RTC Li-ion battery holder
- 2 x Antenna holes for Wi-Fi/GSM

I/O Interface-Rear

- 2 x USB 3.0 ports (blue color, 900mA per each)
- 1 x DVI-I
- 1 x DVI-D
- 2 x DB9 for 2x COM ports
  - COM1: RS232/422/485 with auto flow control
  - COM2: RS232/422/485 with auto flow control
  - COM1 support 5V/12V/ring function by jumper, default is ring
- 1 x Line-out and 1 x Mic-in (realtek HD ALC886)
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE

I/O Interface-Internal

- 4 x GPI and 4 GPO (5V, TTL type)
- 1 x Pin header for COM3~COM6, RS232 only
- 1 x USB 2.0 internal connector

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x mSATA (SATA 3 0)
- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- 2 x mini-PCIe sockets
  - 1 x mini-PCIe socket for Wi-Fi/3.5G
  - 1 x mini-PCIe socket for mSATA/Fieldbus
    *Onboard JP8 jumper switch for mSATA/Fieldbus
- NISE 3720E: one PCIe x4 expansion slot
  - Add-on card length: one 169mm max.
  - Power consumption: 10W/slot max.

Power Requirements

- AT/ATX power mode (ATX power mode, default with jumper switch)
- Power input: typical +24Vdc +/-20%
- Power adapter: optional AC to DC power adapter (+24Vdc, 120W)

Dimensions

- 215mm (W) x 272mm (D) x 93mm (H) without wall mount bracket

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 60°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -40°C to 85°C
- Relative humidity: 95% at 40°C
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6

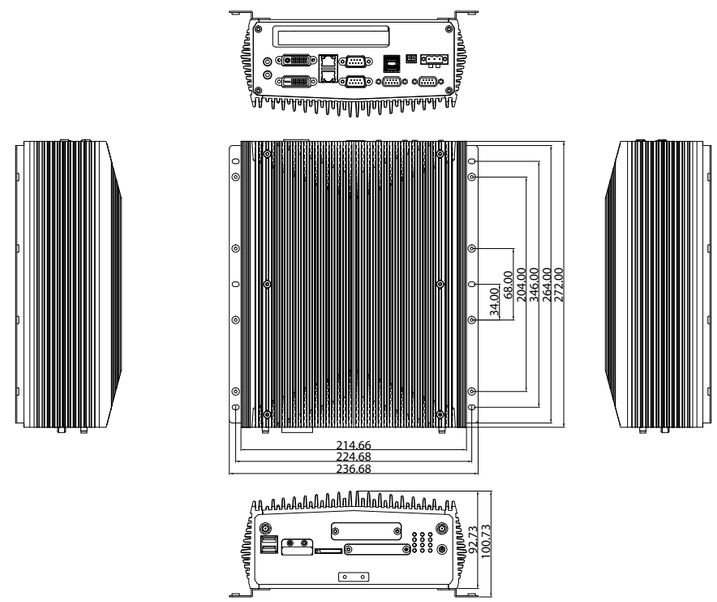
Certifications

- CE approval
- FCC Class B
- LVD

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 8.1 32-bit and 64-bit
- Windows 10 64-bit

Dimension Drawing



Ordering Information

Barebone

- **NISE 3720E-5650U (P/N: 10J00372004X0)**
  Intel® Core™ i7-5650U fanless system with one PCIe expansion
- **NISE 3720E2-5650U (P/N: 10J00372005X0)**
  Intel® Core™ i7-5650U fanless system with two PCIe expansion
- **NISE 3720P2-5650U (P/N: 10J00372007X0)**
  Intel® Core™ i7-5650U fanless system with two PCI expansion
- **NISE 3720P2E-5650U (P/N: 10J00372008X0)**
  Intel® Core™ Core™ i7-5650U system with one PCI expansion and one PCIe expansion
- **NISE 3720E (P/N: 10J00372000X0)**
  Intel® Core™ i7-4650U fanless system with one PCIe expansion
- **NISE 3720E2 (P/N: 10J00372001X0)**
  Intel® Core™ i7-4650U fanless system with two PCIe expansion
- **NISE 3720P2 (P/N: 10J00372002X0)**
  Intel® Core™ i7-4650U fanless system with two PCI expansion
- **NISE 3720P2E (P/N: 10J00372003X0)**
  Intel® Core™ Core™ i7-4650U system with one PCI expansion and one PCIe expansion
- **24V, 120W AC/DC power adapter w/o power core (P/N: 7400120022X00)**

NISE 3720E2/P2/P2E

Intel® Core™ i7 Fanless System
with mSATA, mini-PCIe, and Two Expansion Slots

Main Features

- Support both Intel® 5th generation i7/i5/i3 processors with U platform, Dual Core with HD graphical power
- 1 x DVI-I , 1 x DVI-D with three independent display support
- 2 x Intel® GbE LAN ports; support WoL, teaming and PXE
- 2 x USB 3.0 & 2 x USB 2.0
- 2 x RS232/422/485 with auto flow control
- 1 x CFast socket
- 1 x Internal mini-PCIe socket support optional mSATA or Fieldbus module (by jumper switch)
- 1 x Internal mini-PCIe socket support optional Wi-Fi or 3.5G (auto detection)
- Support external RTC battery holder
- Support 24V DC input

Product Overview

With the 5th generation Intel® Core™ BGA processor, NISE 3720 immediately becomes a remarkable model in the NISE family line. By comparing to the previous Ivy-Bridge mobile platform, the 5th generation mobile platform increases computing power up to 10%, and the graphical performance also increases up to 30% with Intel® HD graphics 6000. The mobile processor features ultra low power consumption (15W), and the NISE 3720 system is housing in a ruggedized design with aluminum chassis. This combination allows NISE 3720 to offer great computing/graphical power and able to run from -20 to 60 Celsius Degree.

NISE 3720 supports up to 8G DDR3L memory and provides SATAIII/CFast interfaces for storage expansions. For network connectivity, NISE 3720 supports 2x Intel® I210-IT LAN ports onboard for dual network teaming functions. For power input range, NISE 3720 supports +24V DC Input with +/- 20% and this is significant design improvement for allowing more voltage fluctuation of DC power source.

In addition of the design improvement, NISE3720 is designed to support PCI, PCIex4 and 2x mini-PCIe for more interface expansions. For the 2x mini-PCIe, it can install either fieldbus interfaces (PROFIBUS®, PROFINET®, DeviceNet®, EtherCAT®, and EtherNet/IP™) for automation applications, or 3G/ Wi-Fi/GSM/LTE interface for building up IoT applications. For the PCI/PCIex4 expansion, the user can adapt suitable PCI and PCIex4 cards for their project needs.

With such rich expansions, the users can easily transform this reliable general purpose PC and set it ready for any specific markets.

Specifications

CPU Support

- Onboard BGA type CPU is Core™ i7-5650U, Dual Core, 2.2GHz, 4M Cache, Max Turbo Frequency 3.1 GHz
- Onboard BGA type CPU is Core™ i7-4650U, Dual Core, 1.7GHz, 4M Cache, Max Turbo Frequency 3.3 GHz
- Support following onboard BGA type processors by project base
  - 5th generation Intel® Core™ i5/i3/Celeron® MCP processors
  - Core™ i5-5350U, Dual Core, 1.8GHz, 3M Cache, Max Turbo Frequency 2.9 GHz
  - Core™ i3-5010U, Dual Core, 2.1GHz, 3M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR3L SO-DIMM socket, support up to 8GB DDR3L 1333/1600 RAM, un-buffered and non-ECC

Display Option

- Support dual independent sdsplay
  - DVI-I (DVI-D + VGA)
  - DVI-D

I/O Interface-Front

- ATX power on/off switch
- 1 x Power status/1 x HDD access LEDs
- 2 x LAN status/1 x CFast LEDs
- 3 x Programmable GPO/1 x battery low LEDs
- 2 x USB 2.0 ports (500mA per each)
- 1 x External CFast socket
- 1 x SIM card holder
- 1 x External RTC Li-ion battery holder
- 2 x Antenna holes for Wi-Fi/GSM

I/O Interface-Rear

- 2 x USB 3.0 ports (blue color, 900mA per each)
- 1 x DVI-I
- 1 x DVI-D
- 2 x DB9 for 2x COM ports
  - COM1: RS232/422/485 with auto flow control
  - COM2: RS232/422/485 with auto flow control
  - COM1 support 5V/12V/ring function by jumper, default is ring
- 1 x Line-out and 1 x Mic-in (realtek HD ALC886)
- 2 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE

I/O Interface-Internal

- 4 x GPI and 4 GPO (5V, TTL type)
- 1 x Pin header for COM3~COM6, RS232 only
- 1 x USB 2.0 internal connector

Storage Device

- 1 x CFast (SATA 3.0)
- 1 x mSATA (SATA 3 0)
- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- 2 x mini-PCIe sockets
  - 1 x mini-PCIe socket for Wi-Fi/3.5G
  - 1 x mini-PCIe socket for mSATA/Fieldbus
    *Onboard JP8 jumper switch for mSATA/Fieldbus
- NISE 3720E2: one PCIe x4 and one PCIe x1 expansion slot
  - Add-on card length: one 169mm max. and one 240mm max.
  - Power consumption: 10W/slot max.
- NISE 3720P2: two PCI expansion slot
  - Add-on card length: one 169mm max. and one 240mm max.
  - Power consumption: 10W/slot max.
- NISE 3720P2E: one PCIe x4 and one PCI expansion slot
  - Add-on card length: one 169mm max. and one 240mm max.
  - Power consumption: 10W/slot max.

Power Requirements

- AT/ATX power mode (ATX power mode, default with jumper switch)
- Power input: typical +24Vdc +/-20%
- Power adapter: optional AC to DC power adapter (+24Vdc, 120W)

Dimensions

- 215mm(W) x 272mm(D) x 114mm(H) without wall mount bracket

Environment

- Operating temperature: ambient with air flow: -20°C to 60°C (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -40°C to 85°C
- Relative humidity: 95% at 40°C
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - CFast: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection w/ HDD condition:
  - Random: 0.5Grms @ 5~500Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500Hz, IEC60068-2-6

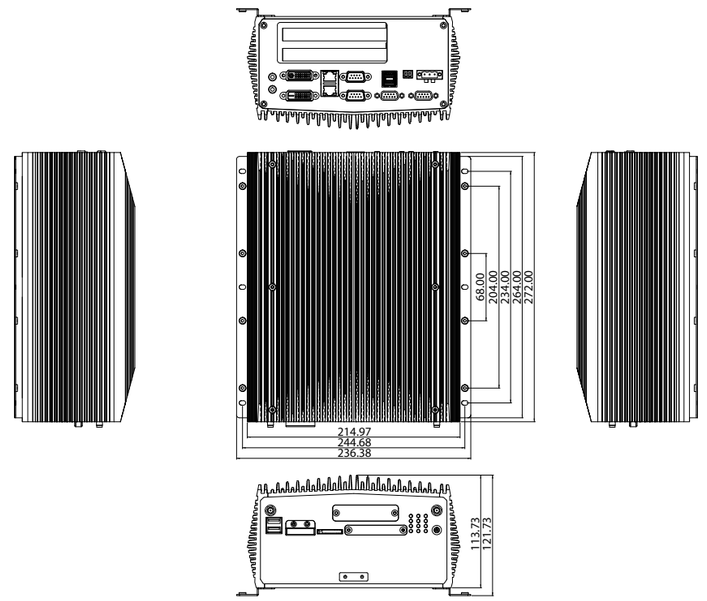
Certifications

- CE approval, FCC Class B, LVD

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 8.1 32-bit and 64-bit

Dimension Drawing



Ordering Information

Barebone

- **NISE 3720E-5650U (P/N: 10J00372004X0)**
  Intel® Core™ i7-5650U fanless system with one PCIe expansion
- **NISE 3720E2-5650U (P/N: 10J00372005X0)**
  Intel® Core™ i7-5650U fanless system with two PCIe expansion
- **NISE 3720P2-5650U (P/N: 10J00372007X0)**
  Intel® Core™ i7-5650U fanless system with two PCI expansion
- **NISE 3720P2E-5650U (P/N: 10J00372008X0)**
  Intel® Core™ Core™ i7-5650U system with one PCI expansion and one PCIe expansion
- **NISE 3720E (P/N: 10J00372000X0)**
  Intel® Core™ i7-4650U fanless system with one PCIe expansion
- **NISE 3720E2 (P/N: 10J00372001X0)**
  Intel® Core™ i7-4650U fanless system with two PCIe expansion
- **NISE 3720P2 (P/N: 10J00372002X0)**
  Intel® Core™ i7-4650U fanless system with two PCI expansion
- **NISE 3720P2E (P/N: 10J00372003X0)**
  Intel® Core™ Core™ i7-4650U system with one PCI expansion and one PCIe expansion
- **24V, 120W AC/DC power adapter w/o power core (P/N: 7400120015X00)**

NISE 3800E

6th Generation Intel® Core™ i7/i5/i3 LGA
Fanless System with Expansion

Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q170 PCH
- Support 1 x 2.5" SATA HDD
- 1 x DVI-D, 1 x DP, and 1 x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 1 x External M.2 socket and 1 x SIM card socket
- 4 x USB 3.0, 2 x USB 2.0, 2 x RS232/422/485 with auto flow contol
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus
- Support +9V to 30VDC input; ATX power mode
- One PCIe x4 expansions

Product Overview

Integrated with 6th generation Intel® Core™ i7/i5/i3 processors, NISE 3800 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3800 supports up to 16G DDR4 memory and have several options on storage devices like M.2, HDD, mSATA or SSD. NISE 3800 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3800 also designed two internal mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache
  - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache
  - Core™ i3-6100TE, Dual Core, 2.7GHz, 4M Cache
  - Intel® Pentium® Processor G4400TE 2.4GHz , 3M Cache
  - Intel® Celeron® Processor G3900TE 2.3GHz , 2M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 SO-DIMM socket, support up to 16GB with un-buffered an non-ECC

Display Option

- Three independent display
  - HDMI + DP+ DVI-D
- Dual independent display
  - HDMI + DP
  - HDMI + DVI-D
  - DP + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs
- 2 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x DP
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External M.2 socket
- 1 x SIM card holder

Rear I/O Interface

- 2 x DB9 for COM1 & COM2
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x HDMI port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switc
- +9V to 30V DC input

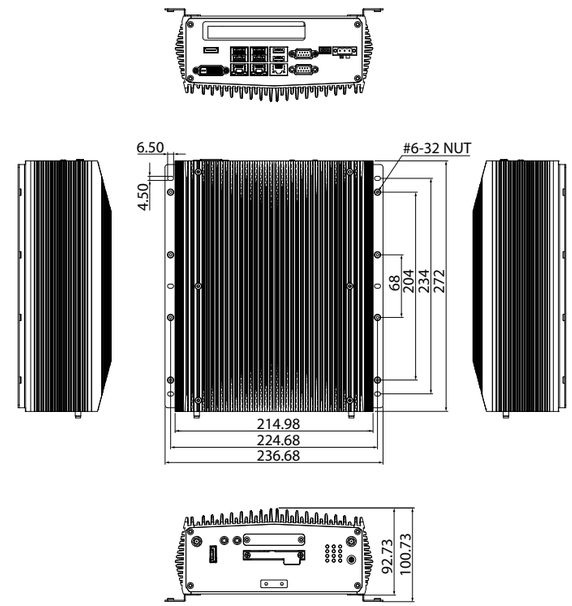
Storage Device

- 1 x M.2 (SATA 3.0)
- 1 x mSATA (SATA 3 0)
- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- One PCIe x4 expansion slot
  - Add-on card length: 169mm max.
  - Power consumption: 10W/slot max.
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus

Dimension Drawing



Power Requirements

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 93mm (H) without wall mount bracket (8.5" x 10.7" x 3.7")

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval- EN61000-6-2- EN61000-6-4
- FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 8.1 32-bit and 64-bit
- Windows 10 64 bits

Weight Information

- Gross weight: 5.9kg
- Net weight: 4.5kg

Ordering Information

- **NISE 3800E System (P/N: 10J00380003X0)**
  6th generation Intel® Core™ i7/i5/i3 fanless system with one PCIe x4 expansion
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120023X00)**

NISE 3800E2/P2/P2E

6th Generation Intel® Core™ i7/i5/i3 LGA
Fanless System with Expansion

Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q170 PCH
- Support 1 x 2.5" SATA HDD
- 1 x DVI-D, 1 x DP, and 1 x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 1 x External M.2 socket and 1 x SIM card socket
- 4 x USB 3.0, 2 x USB 2.0, 2 x RS232/422/485 with auto flow control
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus
- Support +9V to 30VDC input; ATX power mode
- 2 x PCI or PCIe x4 expansions

Product Overview

Integrated with 6th generation Intel® Core™ i7/i5/i3 processors, NISE 3800 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3800 supports up to 16G DDR4 memory and have several options on storage devices like M.2, HDD, mSATA or SSD. NISE 3800 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3800 also designed two internal mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache
  - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache
  - Core™ i3-6100TE, Dual Core, 2.7GHz, 4M Cache
  - Intel® Pentium® Processor G4400TE 2.4GHz , 3M Cache
  - Intel® Celeron® Processor G3900TE 2.3GHz , 2M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 SO-DIMM socket, support up to 16GB with un-buffered and non-ECC

Display Option

- Three independent display
  - HDMI + DP+ DVI-D
- Dual independent display
  - HDMI + DP
  - HDMI + DVI-D
  - DP + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs
- 2 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x DP
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External M.2 socket
- 1 x SIM card holder

Rear I/O Interface

- 2 x DB9 for COM1 & COM2
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x HDMI port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switch
- +9V to 30V DC input

Storage Device

- 1 x M.2 (SATA 3.0)
- 1 x mSATA (SATA 3 0)
- 1 x 2.5" HDD (SATA 3.0)

Expansion Slot

- NISE 3800E2: two PCIe x4 expansion slots
  - Add-on card length: one 169mm max, and one 240mm max.
  - Power consumption: 10W/slot max
- NISE 3800P2: two PCI expansion slots
  - Add-on card length: one 169mm max, and one 240mm max.
  - Power consumption: 10W/slot max
- NISE 3800P2E: one PCIe x4 and one PCI expansion slot
  - Add-on card length: one 169mm max for PCIe x4, and one 240mm max for PCI
  - Power consumption: 10W/slot max
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus

Power Requirements

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 114mm (H) without wall mount bracket (8.5" x 10.7" x 4.5")

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°C
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval- EN61000-6-2- EN61000-6-4
- FCC Class A

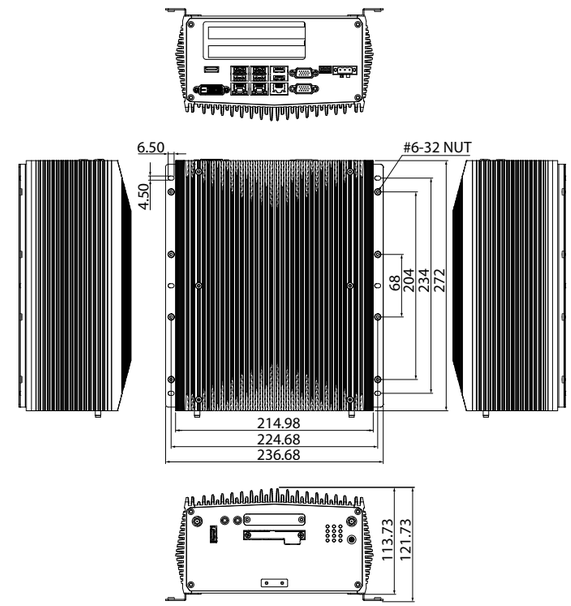
OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 8.1 32-bit and 64-bit
- Windows 10 64 bits

Weight Information

- Gross weight: 6.4kg
- Net weight: 5.0kg

Dimension Drawing



Ordering Information

- **NISE 3800E2 System (P/N: 10J00380002X0)**
  6th generation Intel® Core™ i7/i5/i3 fanless system with two PCIe x4 expansions
- **NISE 3800P2 System (P/N: 10J00380005X0)**
  6th generation Intel® Core™ i7/i5/i3 fanless system with two PCI expansions
- **NISE 3800P2E System (P/N: 10J00380004X0)**
  6th generation Intel® Core™ i7/i5/i3 fanless system with one PCI and one PCIe x4 expansion
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120023X00)**

NISE 3800R

6th Generation Intel® Core™ i7/i5/i3 LGA
Fanless System with Expansion

Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q170 PCH
- Support 2 x 2.5" SATA HDD
- 1 x DVI-D, 1 x DP, and 1 x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 1 x External M.2 socket and 1 x SIM card socket
- 4 x USB 3.0, 2 x USB 2.0, 2 x RS232/422/485 with auto flow contol
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus
- Support +9V to 30VDC input; ATX power mode
- 1*two 2.5" HDDs Bracket Tray

Product Overview

Integrated with 6th generation Intel® Core™ i7/i5/i3 processors, NISE 3800 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3800 supports up to 16G DDR4 memory and have several options on storage devices like M.2, HDD, mSATA or SSD. NISE 3800 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3800 also designed two internal mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-6700TE, Quad Core, 2.4GHz, 8M Cache
  - Core™ i5-6500TE, Quad Core, 2.3GHz, 6M Cache
  - Core™ i3-6100TE, Dual Core, 2.7GHz, 4M Cache
  - Intel® Pentium® Processor G4400TE 2.4GHz , 3M Cache
  - Intel® Celeron® Processor G3900TE 2.3GHz , 2M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 SO-DIMM socket, support up to 16GB with un-buffered an non-ECC

Display Option

- Three independent display
  - HDMI + DP+ DVI-D
- Dual independent display
  - HDMI + DP
  - HDMI + DVI-D
  - DP + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs
- 2 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x DP
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External M.2 socket
- 1 x SIM card holder

Rear I/O Interface

- 2 x DB9 for COM1 & COM2
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 1 x DVI-D port
- 1 x HDMI port
- 3 x Intel® I210IT GbE LAN ports; support WoL, teaming and PXE
- 1 x 2-pin remote power on/off switc
- +9V to 30V DC input

Storage Device

- 1 x M.2 (SATA 3.0)
- 1 x mSATA (SATA 3 0)
- 2 x 2.5" HDD (SATA 3.0) optional

Expansion Slot

- 2 x 2.5 " HDDs
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA/ Fieldbus

Power Requirements

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 93mm (H) without wall mount bracket (8.5" x 10.7" x 3.7")

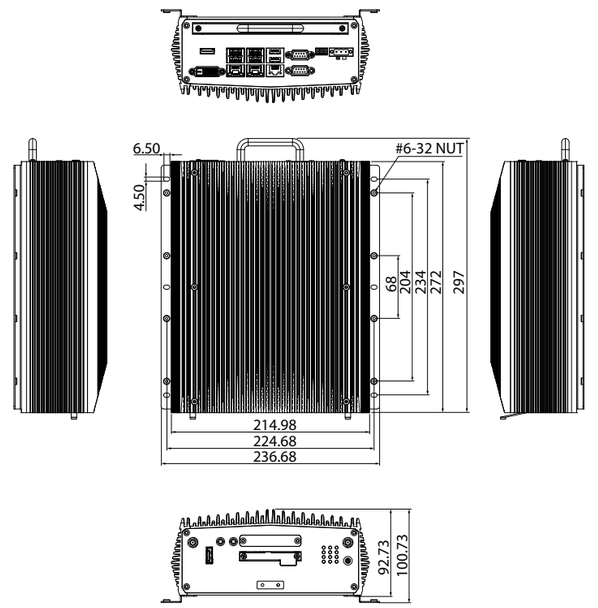
Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6

Dimension Drawing



Certifications

- CE approval- EN61000-6-2- EN61000-6-4
- FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 8.1 32-bit and 64-bit
- Windows 10 64 bits

Weight Information

- Gross weight: 5.9kg
- Net weight: 4.5kg

Ordering Information

- **NISE 3800R System (P/N: 10J00380001X0)**
  6th generation Intel® Core™ i7/i5/i3 fanless system with two external 2.5" HDDs bracket to support RAID 0/1
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120023X00)**

NISE 3900E

8th Generation Intel® Core™ i7/i5/i3 LGA
Fanless System with Expansion

Main Features

- Support 8th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q370 PCH
- Support 1 x 2.5" SATA HDD
- 1 x DVI-D, 1 x DP, and 1 x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 1 x External M.2 socket and 1 x SIM card socket
- 6 x USB 3.0, 4 x USB 2.0, 2 x RS232/422/485 with auto flow control
- 1 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/4G LTE
- Support +9V to 30VDC input; ATX power mode
- One PCIe x4 expansion

Product Overview

Integrated with 8th generation Intel® Core™ i7/i5/i3 processors, NISE 3900 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3900 supports up to 16G DDR4 memory and have several options on storage devices like M.2, HDD or SSD. NISE 3900 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3900 also designed one internal mini-PCIe sockets to support IoT wireless connectivity applications (support optional Wi-Fi, 3.5G, 4G LTE modules).

Specifications

CPU Support

- Support 8th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-8700T, 6 Core, 2.4GHz, 12M Cache
  - Core™ i5-8500T, 6 Core, 2.1GHz, 9M Cache
  - Core™ i3-8100T, 4 Core, 3.1GHz, 6M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 2400/2666 SO-DIMM socket, support up to 16GB with un-buffered an non-ECC

Display Option

- Three independent display
  - HDMI + DP+ DVI-D
- Dual independent display
  - HDMI + DP
  - HDMI + DVI-D
  - DP + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs
- 2 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs
- 1 x Battery low
- 1 x M.2

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x DP
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External M.2 socket (M-key)
- 1 x SIM card holder
- 4 x USB 2.0 ports (500mA per each)

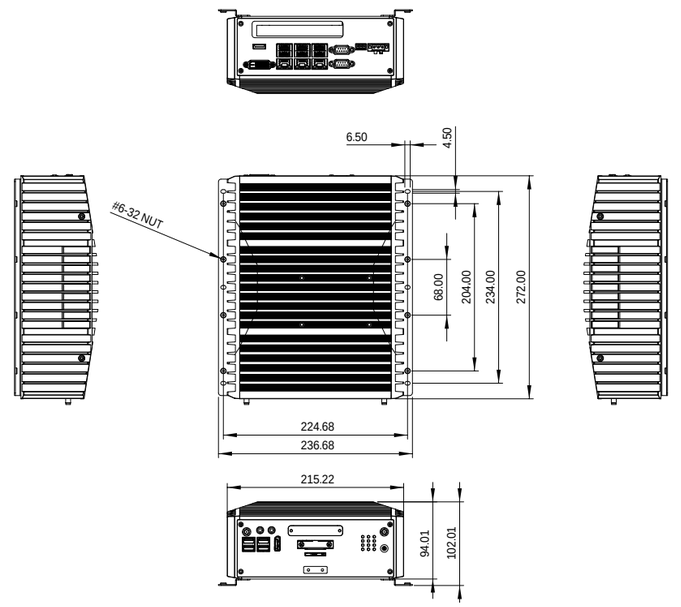
Rear I/O Interface

- 2 x DB9 for COM1 & COM2
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
- 6 x USB 3.1 ports (900mA per each)
- 1 x DVI-D port
- 1 x HDMI port
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 1 x Intel® I219-LM GbE LAN port
- 1 x 3-pin remote power on/off switch
- +9V to 30V DC input

Internal I/O

- COM3/COM4: internal box header, support RS232 only
- 8CH GPIO: internal pin header, support 4 x GPO and 4 x GPI, TTL 5V level
- On-board TPM2.0 (SLB9665) for data encryption purpose

Dimension Drawing



Storage Device

- 1 x Internal M.2 socket (M-key SATA 3.0)
- 1 x 2.5" HDD or SSD (SATA 3.0) driver bay

Expansion Slot

- One PCIe x4 expansion slot
  - Add-on card length: 169mm max.
  - Power consumption: 10W/slot max.
- 1 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/4G LTE

Power Requirements

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 94mm (H) without wall mount bracket (8.5" x 10.7" x 3.7")

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection with SSD & M.2 condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval- EN61000-6-2- EN61000-6-4
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Linux Kernel 4.9

Weight Information

- Gross weight: TBD
- Net weight: TBD

Ordering Information

- **NISE 3900E System (P/N: 10J00390000X0)**
  8th generation Intel® Core™ i7/i5/i3 fanless system with one PCIe x4 expansion
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120023X00)**

NISE 3900E2/P2/P2E

8th Generation Intel® Core™ i7/i5/i3 LGA
Fanless System with Expansion

Main Features

- Support 8th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
- Intel® Q370 PCH
- Support 1 x 2.5" SATA HDD
- 1 x DVI-D, 1 x DP, and 1 x HDMI with independent display support
- Three Intel® GbE LAN ports; support WoL, teaming and PXE
- 1 x External M.2 socket and 1 x SIM card socket
- 6 x USB 3.0, 4 x USB 2.0, 2 x RS232/422/485 with auto flow control
- 1 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/4G LTE
- Support +9V to 30VDC input; ATX power mode
- One PCIe x4 expansion

Product Overview

Integrated with 8th generation Intel® Core™ i7/i5/i3 processors, NISE 3900 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 3900 supports up to 16G DDR4 memory and have several options on storage devices like M.2, HDD or SSD. NISE 3900 supports wide range of DC input from +9V to 30V DC input, and can be operated in an extended operating temperature range between -5 to 55 Celsius degree. For extended module availability, NISE 3900 also designed one internal mini-PCIe sockets to support IoT wireless connectivity applications (support optional Wi-Fi, 3.5G, 4G LTE modules).

Specifications

CPU Support

- Support 8th generation Intel® Core™ i7/i5/i3 LGA socket type embedded processor
  - Core™ i7-8700T, 6 Core, 2.4GHz, 12M Cache
  - Core™ i5-8500T, 6 Core, 2.1GHz, 9M Cache
  - Core™ i3-8100T, 4 Core, 3.1GHz, 6M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 2400/2666 SO-DIMM socket, support up to 16GB with un-buffered an non-ECC

Display Option

- Three independent display
  - HDMI + DP+ DVI-D
- Dual independent display
  - HDMI + DP
  - HDMI + DVI-D
  - DP + DVI-D

Front I/O Interface Status LEDs

- 3 x LAN active LEDs
- 2 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs
- 1 x Battery low
- 1 x M.2

Front I/O Interface

- 1 x ATX power on/off switch
- 1 x DP
- 1 x Line-out and 1 x Mic-in
- 2 x Antenna holes
- 1 x External M.2 socket (M-key)
- 1 x SIM card holder
- 4 x USB 2.0 ports (500mA per each)

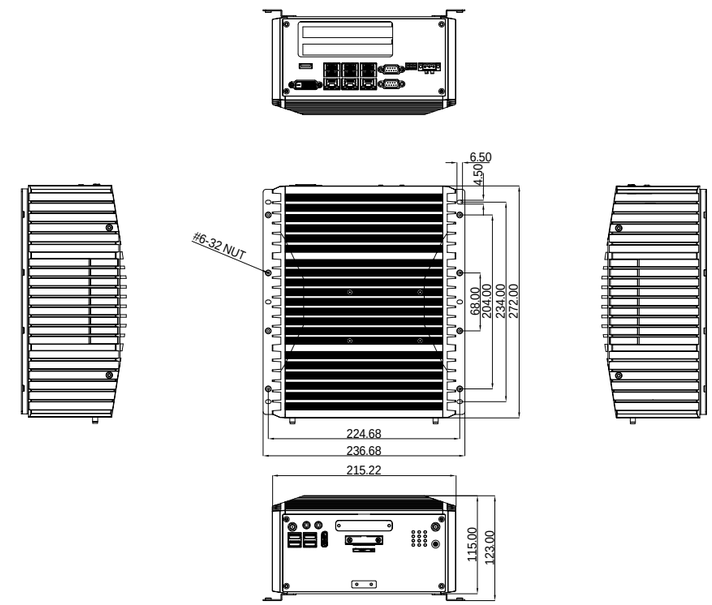
Rear I/O Interface

- 2 x DB9 for COM1 & COM2
  - COM1: RS232/422/485 auto flow control
  - COM2: RS232/422/485 auto flow control
- 6 x USB 3.1 ports (900mA per each)
- 1 x DVI-D port
- 1 x HDMI port
- 2 x Intel® I210-IT GbE LAN ports; support WoL, teaming and PXE
- 1 x Intel® I219-LM GbE LAN port
- 1 x 3-pin remote power on/off switch
- +9V to 30V DC input

Internal I/O

- COM3/COM4: internal box header, support RS232 only
- 8CH GPIO: internal pin header, support 4 x GPO and 4 x GPI, TTL 5V level
- On-board TPM2.0 (SLB9665) for data encryption purpose

Dimension Drawing



Storage Device

- 1 x External M.2 socket (M-key SATA 3.0)
- 1 x 2.5" HDD or SSD (SATA 3.0) driver bay

Expansion Slot

- NISE 3900E2: two PCIe x4 expansion slots
  - Add-on card length: one 169mm max, and one 240mm max.
  - Power consumption: 10W/slot max
- NISE 3900P2: two PCI expansion slots
  - Add-on card length: one 169mm max, and one 240mm max.
  - Power consumption: 10W/slot max
- NISE 3900P2E: one PCIe x4 and one PCI expansion slot
  - Add-on card length: one 169mm max for PCIe x4, and one 240mm max for PCI
  - Power consumption: 10W/slot max
- 1 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/4G LTE

Power Requirements

- AT/ATX power mode (default: ATX power mode)
- Power input: +9 to +30V DC
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 215 mm(W) x 272mm (D) x 115mm (H) without wall mount bracket (8.5" x 10.7" x 3.7")

Construction

- Aluminum and metal chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -5°C to 55°
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 95% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection with SSD & M.2 condition:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval- EN61000-6-2- EN61000-6-4
- FCC Class A

OS Support Lists

- Windows 10 64-bit
- Linux Kernel 4.9

Weight Information

- Gross weight: TBD
- Net weight: TBD

Ordering Information

- **NISE 3900E2 System (P/N: 10J00390001X0)**
  8th generation Intel® Core™ i7/i5/i3 fanless system with two PCIe x4 expansions
- **NISE 3900P2 System (P/N: 10J00390002X0)**
  8th generation Intel® Core™ i7/i5/i3 fanless system with two PCI expansions
- **NISE 3900P2E System (P/N: 10J00390003X0)**
  8th generation Intel® Core™ i7/i5/i3 fanless system with one PCI and one PCIe x4 expansion
- **24V, 120W AC to DC power adapter w/o power cord (P/N: 7400120023X00)**

NISE 4200

6th Generation Intel® Core™ i7/i5/i3 BGA
Fanless System with Expansion

Main Features

- Support 6th generation Intel® Core™ i7/i5/i3 BGA type embedded processor
- Intel® QM170/HM170 PCH
- Support 1 x 2.5" SATA HDD or SSD
- 1 x DVI-D, 2 x DP with independent display support
- Two Intel® GbE LAN ports; support WoL
- 1 x M.2 socket and 1 x SIM card socket
- 4 x USB 3.0, 2 x USB 2.0, 2 x RS232/422/485 with auto flow contol, 4 x RS232
- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/LTE/mSATA
- Support 12V +/- 20% and 24V +/- 20% DC input; ATX power mode

Product Overview

Integrated with 6th generation Intel® Core™ i7/i5/i3 processors, NISE 4200 series is the fanless PC designed for industrial applications which demand high CPU and graphics performance. NISE 4200 supports up to 32G DDR4 memory and have several options on storage devices like M.2, HDD, mSATA or SSD. NISE 4200 supports 12V +/- 20% and 24V +/- 20% DC input, and can be operated in an extended operating temperature range between -20 to 70 Celsius degree. For extended module availability, NISE 4200 also designed two internal mini-PCIe sockets to support IoT applications (integrate with optional GbE LAN, Wi-Fi, 3.5G, LTE module) and common communication applications (integrate with optional GPIO, RS232/422/485 module).

Specifications

CPU Support

- Support 6th generation Intel® Core™ i7/i5/i3 BGA type embedded processor
  - Core™ i7-6822EQ, Quad Core, 2.0GHz, 8M Cache
  - Core™ i5-6442EQ, Quad Core, 1.9GHz, 6M Cache
  - Core™ i3-6102E, Dual Core, 1.9GHz, 4M Cache
- Turbo-boost disabled by default

Main Memory

- 2 x DDR4 SO-DIMM socket, support up to 32GB with un-buffered an non-ECC

Display Option

- Three independent display
  - DP + DP+ DVI-D
- Dual independent display
  - DP + DVI-D

Front I/O Interface Status LEDs

- 2 x LAN active LEDs
- 2 x GPO status/COM1/2 TX/RX LEDs
- 1 x HDD access LEDs

Front I/O Interface

- 1 x ATX power on/off switch
- 2 x DP 1.2
- 1 x Line-out
- 1 x DB9 for COM1
  COM1: RS232/422/485 (BIOS selectable)
- 4 x USB 3.0 ports (900mA per each)
- 2 x USB 2.0 ports (500mA per each)
- 12V +/- 20% and 24V +/- 20% DC input
- LAN1: Intel® I210-IT GbE LAN ports; support WoL and PXE
- LAN2: 1x Intel® I219-LM GbE LAN, support Intel® AMT 11

Rear I/O Interface

- 5 x DB9 for COM2 & COM3~6
  - COM2: RS232/422/485 auto flow control
  - COM3: RS232
  - COM4: RS232
  - COM5: RS232
  - COM6: RS232
- 1 x DVI-D port

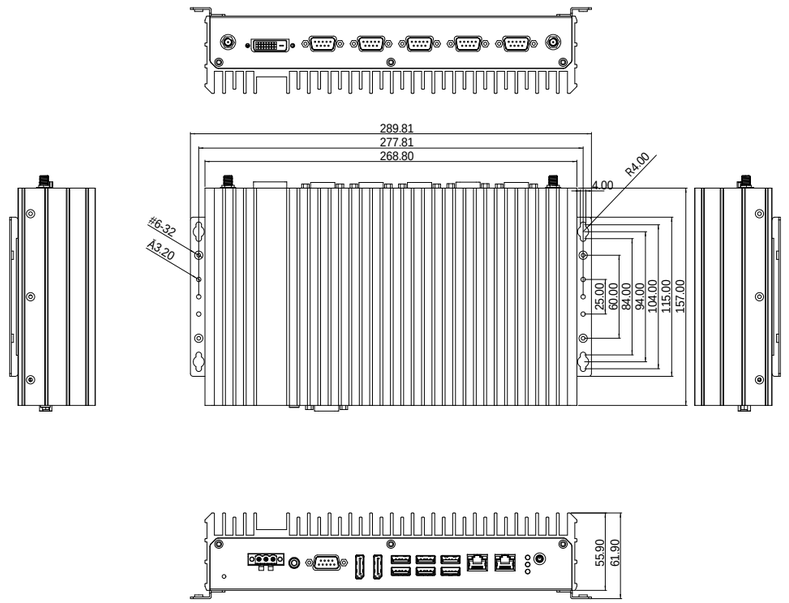
Internal I/O

- 1 x USB 2.0 type A connector
- 1 x USB 2.0 box header
- 16CH GPIO: internal pin header, support 8 x GPO and 8 x GPI, TTL 5V level
- On-board TPM2.0 (SLB9665) for data encryption purpose

Storage Device

- 1 x mSATA (SATA 3 0)
- 1 x 2.5" HDD (SATA 3.0)

Dimension Drawing



Expansion Slot

- 2 x Internal mini-PCIe socket support optional Wi-Fi/3.5G/mSATA
- 1 x 2280 or 2240 B+M Key M.2 slot

Power Requirements

- AT/ATX power mode (default: ATX power mode)
- Power input: 12V +/- 20% and 24V +/- 20% DC input
- Power adapter: optional AC to DC power adapter (24V DC, 120W)

Dimensions

- 269 mm(W) x 157mm (D) x 56mm (H) without wall mount bracket

Construction

- Aluminum chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -20°C to 70°
  (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 93% (non-condensing)
- Shock protection:
  - HDD: 20G, half sine, 11ms, IEC60068-2-27
  - M.2: 50G, half sine, 11ms, IEC60068-2-27
- Vibration protection with HDD condition:
  - Random: 0.5Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 0.5Grms @ 5~500 Hz, IEC60068-2-6
- Vibration protection with SSD & M.2 condition:
  - - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - - Sinusoidal: 2Grms @ 5~500 Hz, IEC60068-2-6

Certifications

- CE approval- EN55032/EN55024
- FCC Class A

OS Support Lists

- Windows 7 32-bit and 64-bit
- Windows 10 64 bits

Weight Information

- Gross weight: 2.8kg
- Net weight: 2.1kg

Ordering Information

- **NISE 4200 System (P/N: 10J00420002X0)**

IKS 614A

Fanless Box PC
with 6th Gen. Intel® Celeron® 3955U (Skylake-U) Dual Core 2.0GHz Processor

Main Features

- On-board 6th Gen. Intel® Celeron® 3955U (Skylake-U) processors
- Support two DDR4 SO-DIMM socket. 32GB max.
- Support multiple display from DisplayPort and HDMI
- 2 x GbE LAN, 4 x COM, 5 x USB ports
- Fanless design
- DC input +12V
- Expansion: M.2 (for Key-M, 2280), mini-PCIe (F/S)

Product Overview

IKS 614A is fanless box PC based on multi-core Intel® Celeron® 3955U (Skylake-U) processor. IKS 614A operates temperature range from 0°C to 50°C with low power consumption at CPU 15 W TDP. This fanless box is aimed at embedded applications for semi-outdoor environment. Such as kiosk, small smart equipment, outdoor systems installed in harsh environments, home automation and thin clients…etc.

It is low profile designed in a compact chassis, 289.3mm (W) x 189mm (D) x 39.5mm (H), with smart airflow. IKS 614A support two DDR4 SODIMM. Also, it offers display outputs of DP and HDMI. The flexibility of modularized selection meets different application in the field.

Specifications

CPU Support
- 6th Gen. Intel® Celeron® 3955U (Skylake-U) dual core 2.0GHz processor, 15W TDP

Main Memory
- 2 x 260-pin SODIMM sockets support up to 32GB DR4 2133 SDRAM, non-ECC, un-buffered memory

Front I/O Interface
- ATX power ON/OFF button
- 1 x USB 2.0

Rear I/O Interface
- 2 x GbE controller
- 4 x USB 3.0
- 1 x DisplayPort (4096 x 2304@60Hz)
- 1 x HDMI (4096 x 2160@24Hz)
- 4 x Serial port (3 x RS232, 1 x RS232/485/422 by COM1)
- 1 x Line-out
- 1 x DC power jack

Storage Device
- 1 x 2.5" HDD/SSD
- 1 x M.2 M-key (2280)

Expansion
- 1 x mini-PCI express slot (full size, support PCIe/USB interface)

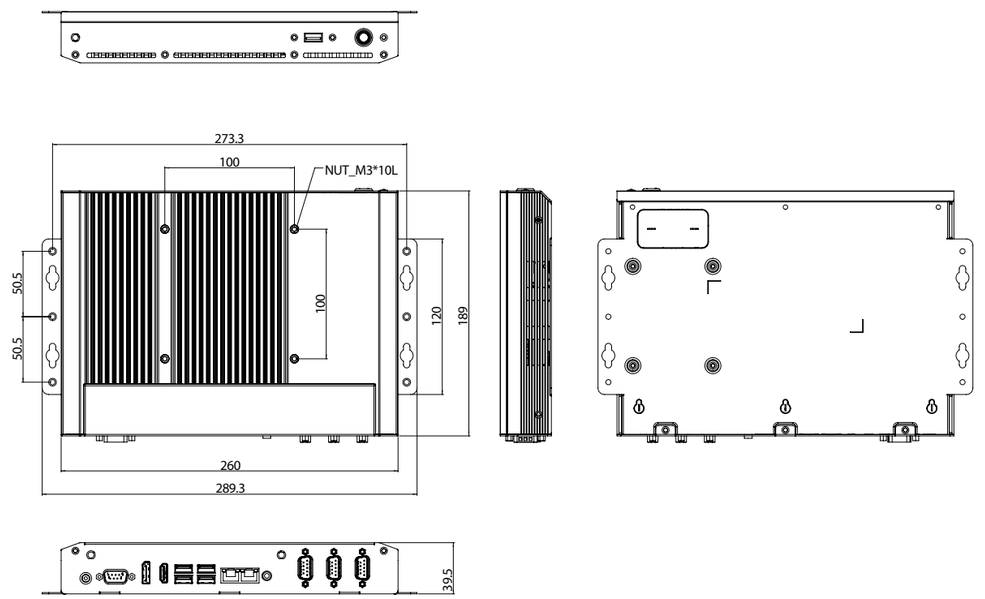
Power Requirements
- Single power input: 12V DC
- 12V, 60W power adapter

Mechanical & Environment
- Operating temperature: 32°F~122°F (0°C~50°C)
- Storage temperature: 40°F~176°F (-40°C~80°C)
- Relative humidity: operating 10%~90%, non-condensing

Dimension
- Display head: 289.3 x 189 x 39.5 (W x D x H) (mm)

Weight
- 1.36 kg

Dimension Drawing



Operating System
- Windows 10 64-bit
- Windows 7 32-bit/64-bit

Certificate
- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **IKS 614A-3955U (P/N:10IK0061400X0)**
  On-board 6th Intel® Celeron® 3955U (Skylake-U) MCP, w/ DisplayPort and HDMI, 2 x Gigabit LAN, 4 x USB 3.0, 4 x serial port
- **12V, 60W power adapter w/o power cord (P/N: 7400060028X00)**

IKS 614B

Fanless Box PC
with Intel® Core™ i7/i5/i3 (Skylake-S and Kaby Lake-S) Processor

Main Features

- Support Intel® Core™ i7/5/3 processors, LGA1511 socket, H110, TDP: 35W
- Support two DDR4 SO-DIMM socket, 32GB Max.
- Support multiple display from two HDMI
- I/O incl. 2 x GbE LAN, 2 x COM, 4 x USB 3.0 & 1 x USB 2.0
- DC input +12V
- Expansion: mSATA, half size mini-PCIe
- Fanless design

Product Overview

IKS 614B is fanless box PC based on 6th/7th Intel® Core™ i and Celeron® processor (formerly codenamed "Skylake" and "Kabylake") to support 35W CPU. This fanless box is aimed at embedded applications for semi-outdoor environment. Such as Kiosk, small smart equipment, outdoor systems installed in harsh environments, home automation and thin clients…etc.

IKS 614B supports a maximum memory of 32GB DDR4 SDRAM. Also, it offers display outputs of two HDMI with 4K/2K @30Hz, in order to provide the flexibility of supporting a range of peripherals and high resolution.

Specifications

CPU Support

- Intel® Core™ i7-6700TE (Skylake)/i7-7700T (Kabylake), LGA1151 socket processor, max. 35W TDP
- Intel® Core™ i5-6500TE (Skylake)/i5-7500T (Kabylake), LGA1151 socket processor, max. 35W TDP
- Intel® Core™ i3-6100TE (Skylake)/i3-7101TE (Kabylake), LGA1151 socket processor, max. 35W TDP

Display

- 2 x HDMI connector
  (up to 4096 x 2160@24 Hz/2560 x 1600@60 Hz, with digital audio)

Main Memory

- 2 x 260-pin DDR4 SODIMM sockets support up to 32GB DDR4 2133 SDRAM, non-ECC, un-buffered memory

Storage Slot

- 2 x SATA 6Gb/s
- 1 x mSATA (SATA 6Gb/s)

Expansion

- 1 x mini-PCIe express slot (half size, support PCIe/USB interface)

Power Requirements

- Single power input: 12V DC
- 12V, 84W power adapter

Front I/O Interface

- ATX power ON/OFF button
- 1 x USB 2.0

Rear I/O Interface

- 2 x GbE controller
- 4 x USB 3.0
- 2 x HDMI display output
- 2 x Serial port
- 1 x Mic-in
- 1 x Line-out
- 1 x DC power jack

Mechanical & Environment

- Operating temperature: 32°F~122°F (0°C~50°C) (depends on CPU)
- Storage temperature: 40°F~176°F (-40°C~80°C)
- Relative humidity: operating 10%~90%, non-condensing

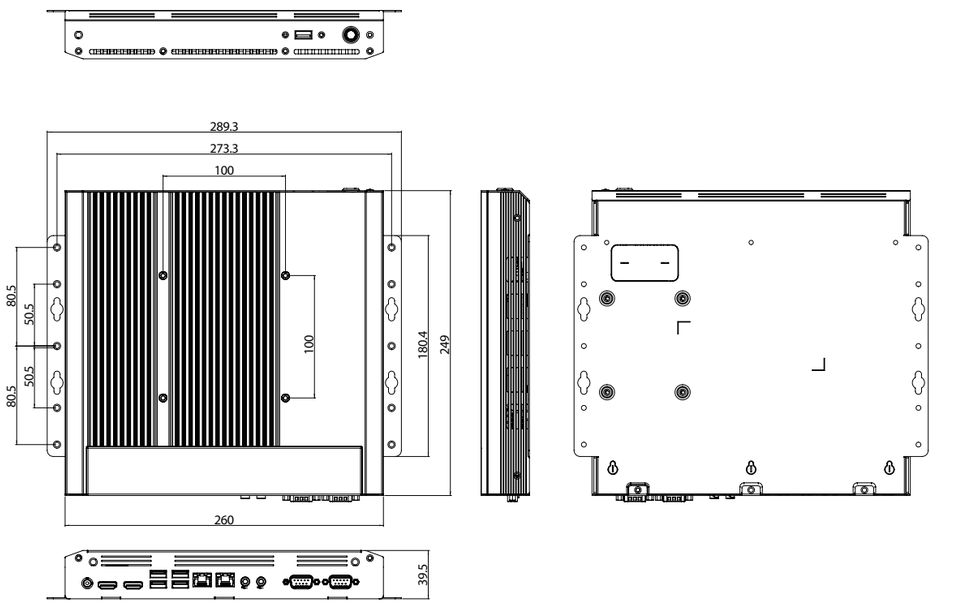
Dimension

- Display head: 289.3 x 249 x 39.5 (W x D x H) (mm)

Weight

- 2.8 kg

Dimension Drawing



Operating System

- Windows 10 64-bit
- Windows 7 32-bit/64-bit

Certificate

- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **IKS 614B (P/N: 10IK0061401X0)**
  6th Generation Intel® Core™ i7/i5/i3, LGA1151 socket processor, max. 35W, H110, 2 x DDR4, DP/HDMI, 4 x USB 3.0, 1 x USB 2.0, 2 x GbE, SATA, 2 x RS232, 2 x mini-PCIe, 12VDC, 0~40°C (support Intel® 7th LGA1151 35W CPU), 0~50°C (support Intel® 6th LGA1151 35W CPU)
- **12V, 84W power adapter w/o power cord (P/N: 7400084003X00)**

Options

- **Intel® Core™ i7-6700TE (8M Cache, up to 3.40 GHz), 4C/8T, 35W (P/N: 71IX02GTM2X00)**
- **Intel® Core™ i5-6500TE (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IX02GTM1X00)**
- **Intel® Core™ i3-6100TE (4M Cache, 2.70 GHz), 2C/4T, 35W (P/N: 71IX02GTM3X00)**
- **Intel® Core™ i7-7700T (8M Cache, up to 3.80 GHz), 4C/8T, 35W (P/N: 71IY03GTM1X00)**
- **Intel® Core™ i5-7500T (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IY03GTM2X00)**
- **Intel® Core™ i3-7101TE (3M Cache, 3.40 GHz), 2C/4T, 35W (P/N: 71IY03GTM3X00)**
- **Dual HDD bracket with SATA cable for IKS 614B (P/N: TBD)**

IKS 621A

Fanless Box PC

with Intel® Celeron® N3060 (Braswell) Processor, 2C/2T up to 2.48GHz

Main Features

- On-board Intel® Celeron® N3060 (Braswell) processor
- Support one DDR3L SO-DOMM, up to 8GB
- Support multiple display from VGA and DVI-D
- DC input 12V
- Fanless design
- 2 x GLAN, 4 x USB 3.0, 1 x USB 2.0, 5 x COM
- Expansion: 1 x full-size mIni card, 1 x M.2 (M-Key)

Product Overview

IKS 621A is fanless box PC based on Intel® Celeron® N3060 SoC (formerly codenamed “Braswell”). IKS 621A operates from 0°C to 50°C with low power consumption. This fanless box is aimed at embedded applications for semi-outdoor environment. Such as kiosk, small smart equipment, outdoor systems installed in harsh environments, home automation and thin clients…etc.

It is low profile designed in a compact chassis, 289.3mm (W) x 189mm (D) x 39.5mm (H), with smart airflow. IKS 621A supports a maximum memory of 8GB DDR3L SDRAM. Also, it offers display outputs of VGA and DVI-D. The flexibility of modularized selection meets different application in the field.

Specifications

CPU Support
- Intel® Celeron® N3060 (Braswell) processor, 2C/2T up to 2.48GHz, 6W TDP

Display
- 1 x DVI-D connector (resolution up to 1920 x 1200@60Hz)
- 1 x VGA connector (resolution up to 1920 x 1200@60Hz)

System
- 1 x DDR3L 1600 MHz SO-DIMM, max. 8GB, non-ECC, un-buffered memory
- 2 x Realtek PCIe Gb LAN 8111G GbE
- 5 x Serial ports (4 x RS232, 1 x RS232/485/422 by COM1)
- Support Realtek HD Audio (Line-out, Mic-in)

Storage Device
- 1 x SATA 6.0Gb/s
- 1 x M.2 M key (default: 2280)

Expansion
- 1 x Full size mini card slot (PCIe/USB)

Power Requirements
- Single power 12V DC input

Front I/O
- ATX power ON/OFF button
- 1 x USB 2.0

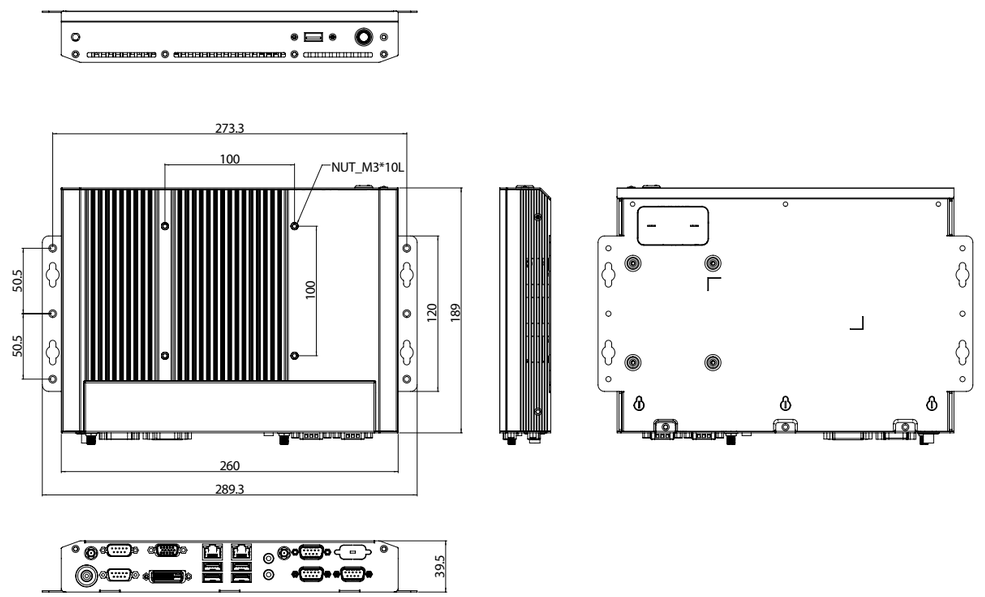
Rear I/O
- 2 x GLAN
- 4 x USB 3.0
- 1 x DVI-D display output
- 1 x VGA display output
- 5 x Serial ports
- 1 x Line-out, 1 x Mic-in
- 1 x Lockable DC power Jack

Mechanical & Environment
- Operating temperature: 32°F~122°F (0°C~50°C)
- Storage temperature: 40°F~176°F (-40°C~80°C)
- Relative humidity: operating 10%~90%, non-condensing

Dimension
- Display head: 289.3 x 189 x 39.5 (W x D x H) (mm)

Weight
- 1.3 kg

Dimension Drawing



Operating System
- Windows 7 32-bit/64-bit
- Windows 10 64-bit

Certificate
- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **IKS 621A-N3060 (P/N: 10IK0062100X0)**
  On-board Intel® Celeron® N3060 (Braswell) processor, w/ VGA & DVI-D, 2 x Gigabit LAN, 4 x USB 3.0, 1 x USB 2.0, 5 x serial port
- **12V, 60W power adapter w/o power cord (P/N: 7400060025X00)**

NDiS B115

Digital Signage Player

Powered by ARM® Cortex®-A17 Quad Core Processor

Main Features

- On board Cortex®-A17 quad core SoC
- Compliant to HDMI 2.0, support 4K2K video content
- On board IEEE802.11 b/g/n and Bluetooth 4.0
- Fanless and slim design
- Support Android

Product Overview

Powered by ARM® Cortex®-A17 Quad core, NDiS B115 can play rich multi-media contents with low power consumption. NDiS B115 is enclosed in a compact chassis and can be easily integrated to display devices, such as LCD TV or PDP at site installation with HDMI display output (up to HDMI 2.0 support 4K2K 60Hz), Giga LAN. NDiS B115 is suitable as an entry level digital signage player for advertising, messaging, and brand promotion.

Specifications

Processor

- Rockchip RK3288 28nm Cortex®-A17 Quad core up to 1.8GHz

Memory

- Support DDR3 2GB memory on board

I/O Interface – Front

- Power LED indicator

I/O Interface-Left

- 1 x SD card slot support up to 64GB flash card
- Rest button
- 1 x USB 2.0

I/O Interface – Rear

- 1 x HDMI 2.0 output
- 1 x RJ45 Gigabit LAN port
- 1 x USB OTG
- 1 x ANT
- DC 5V power input jack
- 1 x Audio line out

Storage

- Internal Flash: default 16G Bytes eMMC flash

Dimension

- 118mm(W) x 101mm (D) x 23.6mm(H)

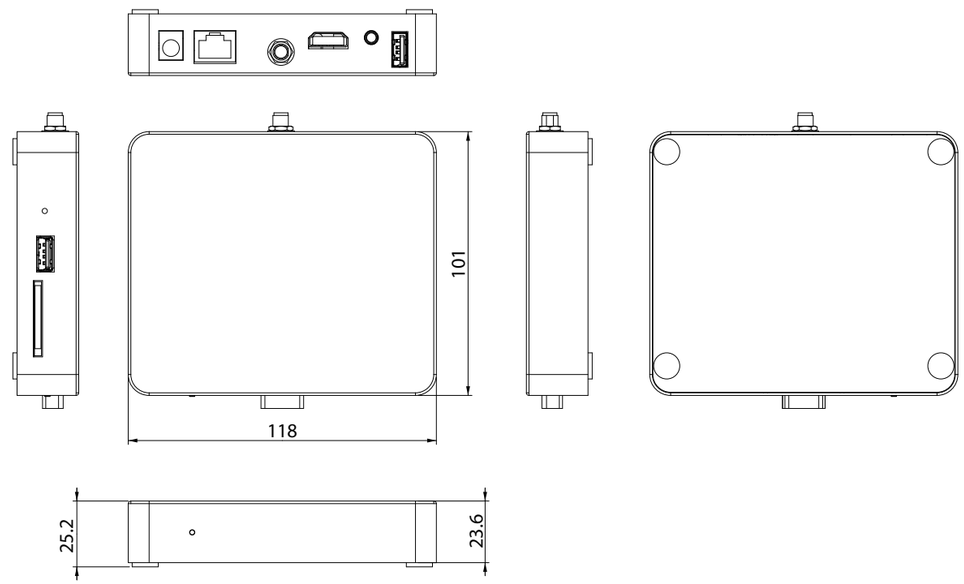
Environment

- Operating temperature: ambient with air flow from -10°C to 50°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 95% (non-condensing)

Operating System

- Android 4.4

Dimension Drawing



Ordering Information

- **NDiS B115 (P/N: 10W00B11500X0)**
  Rockchip RK3288 ARM Cortex-A17 Quad core

NDiS B325

Fanless Embedded Computer Powered by
Intel® Celeron® J3160/Core™ i3-6100U/Core™ i5-6200U SoC Processor

Main Features

- Intel® Celeron® J3160/Core™ i3-6100U/Core™ i5-6200U
- HDMI (4K Resolution) and VGA independent displays (J3160)
- USB 3.0 support
- WLAN support
- Compact and fanless design
- Wide Temperature Support

Product Overview

Powered by new generation Intel® Celeron® J3160/Core™ i3-6100U/Core™ i5-6200U SoC processor, NDiS B325 series digital signage player can handle very rich multimedia contents. With Intel® processor low power consumption feature, In addition, the 6th generation Intel® Core™ processors deliver signifcant improvements up to two and a half times the performance in graphics offering stunning visuals for compelling 4K content creation and media playback. NDiS B325 series supports display output by HDMI and VGA ports (J3160). NDiS B325 (J3160) is ideal as entry level digital signage player, NDiS B325-SI3 (i3-6100U) is high performance player, adding integration flexibility with various peripherals such as touchscreen displays, scanners, readers, and many more. NDiS B325 series The fanless design with wide temperature durability further extends to semi-outdoor usage like QSR drivethrough kiosks, box ofce displays, information stands, bus stops, or digital transit information signs. It is also ideal as a digital signage player delivering enhanced performance and new immersive experiences for advertising, hospitality and brand promotion applications.

Specifications

CPU Support

- Intel® Celeron® SoC Processor J3160 Quad Core 1.6GHz up to 2.24GHz (NDiS B325/B325-B)
- Intel® Core™ i3-6100U SoC processor Dual Core 2.3GHz (NDiS B325-SI3)
- Intel® Core™ i5-6200U SoC processor Dual Core 2.3GHz up to 2.8GHz (NDiS B325-SI5)

Graphics

- Intel® HD Graphics (NDiS B325/B325-B)
- Intel® HD520 Graphics (NDiS B325-SI3/B325-SI5)

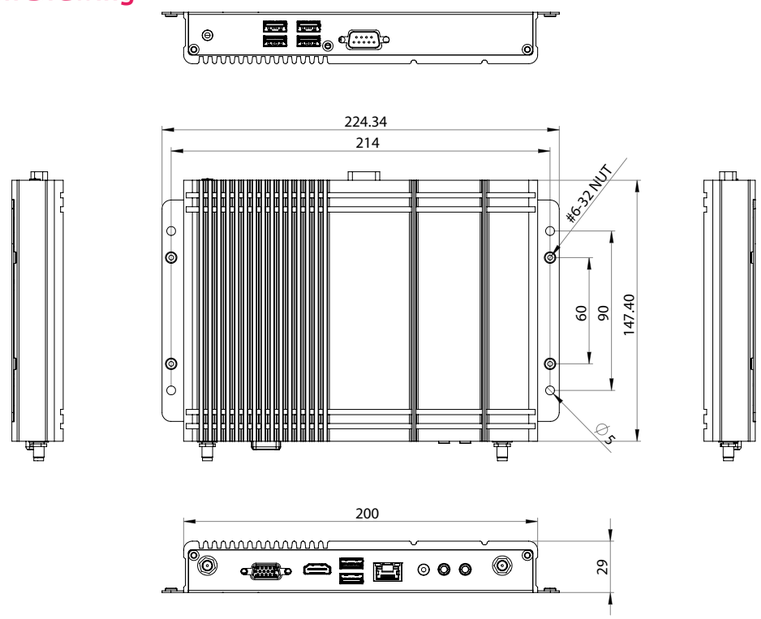
Main Memory

- 1 x 204-pin SO-DIMM socket, supports DDR3L non-ECC, un-buffered memory up to 8G (NDiS B325/B325-B)
- 1 x 260-pin SO-DIMM Sockets, Supports DDR4 1866/2133 MHz non-ECC, un-buffered memory up to 8G (NDiS B325-SI3/B325-SI5)

I/O Interface-Front

- 2 x USB 2.0
- 2 x USB 3.0
- 1 x DB9 for RS232
- 1 x Power LED (NDiS B325)
- 1 x Power Switch with LED (NDiS B325-SI3/B325-SI5/B325-B)

Dimension Drawing



I/O Interface-Rear

- 19V DC Power in
- 1 x VGA (NDiS B325/B325-B Only, NDiS B325-SI3/B325-SI5 change to HDMI)
- 1 x HDMI (4K Resolution)
- 2 x Antenna hole for Wi-Fi or TV tuner
- 2 x USB 3.0
- 1 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 1 x Audio-out
- 1 x Mic-in

Storage

- 1 x 2.5" SATA HDD Bay

Dimensions

- 226.34 x 147.40 x 29.00 mm

Power Supply

- 1 x External 65W AC/DC power adapter

Expansion

- 1 x mini-PCIe slot (NDiS B325/B325-B)
- 1 x NGFF (M.2) E key for optional 22x 30 WLAN module (NDiS B325-SI3/B325-SI5)

Environment

- Operating temperature: -20°C~50°C
- Storage temperature: -25°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification

- CE approval
- FCC Class A

Operating System

- Win 7/WES7/Win 8/WE8S/Win 10/Linux

Ordering Information

- **NDiS B325 (P/N: 10W00B32500X0)**
  Intel® Celeron® J3160 Quad Core fanless system
- **NDiS B325-B (P/N: 10W00B32510X0)**
  Intel® Celeron® J3160 Quad Core fanless system with Power Button
- **NDiS B325-SI3 (PN: 10W00B32506X0)**
  Intel® Core™ i3-6100U Dual Core fanless system
- **NDiS B325-SI5 (P/N: 10W00B32502X0)**
  Intel® Core™ i5-6200U Dual Core fanless system

NDiS B327

Fanless Embedded Computer Powered
by Intel® Celeron® N3060 SoC Processor

Main Features

- Intel® Celeron® N3060
- HDMI (4K resolution) and VGA independent displays USB 3.0 support
- WLAN support
- Compact and fanless design

Product Overview

Powered by Intel® Celeron® N3060 SoC processor, NDiS B327 digital signage player can handle very rich multimedia contents. With Intel® processor low power consumption feature. In addition, the Intel® Celeron® Core™ processors deliver significant improvements up to two and a half times the performance in graphics offering stunning visuals for compelling 4K content creation and media playback. NDiS B327 supports display output by HDMI and VGA ports. Integration flexibility with various peripherals such as touchscreen displays, scanners, readers, and many more. NDiS B327 the fanless durability further extends to semi-outdoor usage like QSR drive through kiosks, box office displays, information stands, bus stops, or digital transit information signs. It is also ideal as a digital signage player delivering enhanced performance and new immersive experiences for advertising, hospitality and brand promotion applications.

Specifications

CPU Support
- Intel® Celeron® SoC processor N3060 dual core 1.6GHz up to 2.28GHz

Graphic
- Intel® integrated HD 400 graphicse

Main Memory
- 2 x 204-pin SO-DIMM sockets, supports DDR3L 1600 MHz non- ECC, un-buffered memory up to 8G (single socket max. 4GB)

I/O Interface-Front
- 2 x USB 2.0
- 2 x USB 3.0
- 1 x DB9 for RS232 (cable)
- 1 x Storage active LED
- 1 x Power switch with LED

I/O Interface-Rear
- 1 x DC-in jack, 2.5/5.5mm (19V DC)
- 1 x VGA (1920 x 1200 resolution)
- 1 x HDMI (4K resolution)
- 2 x Antenna hole
- 2 x USB 3.0
- 1 x RJ45 with LEDs for Gigabit LAN
- 1 x Line-out
- 1 x Mic-in

Storage Device
- 1 x 2.5" SATA SSD bay
- 1 x M.2 2242 SSD, SATA signal

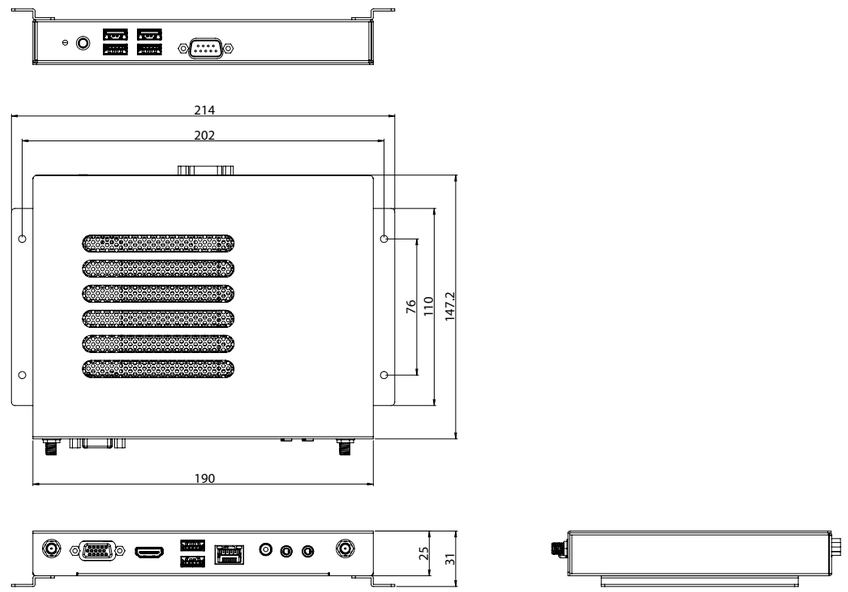
Expansion
- 1 x mini-PCIe full size connector, USB+PCIe signal, support Wi-Fi
- 1 x M.2 B key 2242 slot, SATA support

Dimensions
- 190mm (W) x 149mm (D) x 25mm (H)

Power Supply
- DC power input +19V

Environment
- Operating temperature: @ 100% CPU loading and component thermal profile from 0°C~40°C
- Storage temperature: -20°C~80°C
- Humidity: 95% (non-condensing)

Dimension Drawing



Certification
- CE approval
- FCC Class A

Operating System
- Win7/Win10

Ordering Information

- **NDiS B327 (P/N: 10W00B32701X4)**
  Intel® Celeron® N3060 dual core fanless system

NDiS B328-KI3

Fanless Embedded Computer Powered
by Intel® Core™ i3-7100U, SoC Processor

Main Features

- Intel® Core™ i3-7100U
- HDMI 4K resolution
- USB 3.0 support
- WLAN support
- Compact and fanless design

Product Overview

Powered by 7th Intel® Core i3 SoC processor, NDiS B328-KI3 digital signage player can handle very rich multimedia contents. With Intel® processor low power consumption feature, In addition, the Intel® Core™ processors deliver significant improvements up to two and a half times the performance in graphics offering stunning visuals for compelling 4K content creation and media playback. NDiS B328-KI3 series support display output by HDMI ports and integration flexibility with various peripherals such as touchscreen displays, scanners, readers, and many more. NDiS B328- KI3 series the fanless durability further extends to semi-outdoor usage like QSR drive through kiosks, box office displays, information stands, bus stops or digital transit information signs. It is also ideal as a digital signage player delivering enhanced performance and new immersive experiences for advertising, hospitality and brand promotion applications.

Specifications

CPU Support
- Intel® Core™ i3-7100U SoC processor Dual Core 2.4GHz

Graphic
- Intel® integrated HD 620 graphics

Main Memory
- 2 x 204-pin SO-DIMM sockets, supports DDR4 2133MHz non- ECC, un-buffered memory up to 32G (single socket max. 16GB)

I/O Interface-Front
- 4 x USB 3.0
- 1 x DB9 for RS232 (cable)
- 1 x Storage active LED
- 1 x Power switch with LED

I/O Interface-Rear
- 1 x DC-in jack, 2.5mm (19V DC)
- 2 x HDMI 1.4 (4K resolution)
- 2 x Antenna hole
- 2 x USB 3.0
- 1 x RJ45 with LEDs for Gigabit LAN
- 1 x Line-out
- 1 x Mic-in

Storage Device
- 1 x 2.5” SATA3 HDD/SSD
- 1 x M.2 2280 SSD, PCIe by 4+ SATA signal

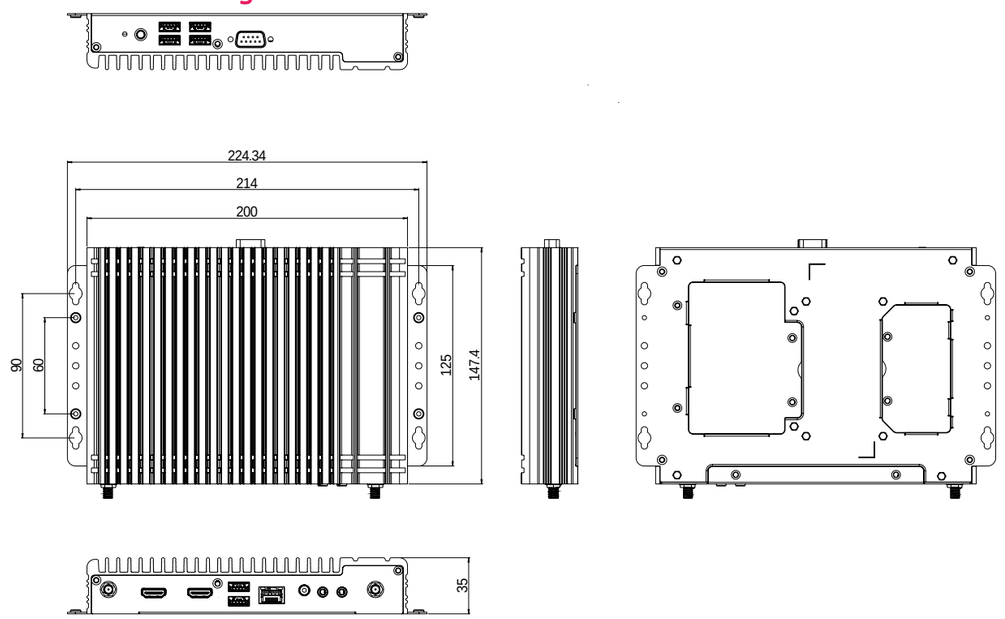
Expansion
- 1 x M.2 E key 2230 slot, support Wi-Fi

Dimensions
- 224.34mm (W) x 147.4mm (D) x 35mm (H)

Power Supply
- DC power input +19V

Environment
- Operating temperature: @ 100% CPU loading and component thermal profile from 0°C ~50°C (with HDD), -20°C~50°C (with SSD)
- Storage temperature: -20°C~70°C
- Humidity: 95% (non-condensing)

Dimension Drawing



Certification
- CE approval
- FCC Class A

Operating System
- Win10 64-bit

Ordering Information

- **NDiS B328-KI3 (P/N: 10W00B32809X4)**
  Intel® Core™ i3-7100U SoC processor, fanless system

NDiS B336R

Fanless Embedded Computer Powered by
Quad Core Intel® Atom™ x7-E3950 Processor, 2.0GHz

Main Features

- 6th generation Intel® Atom™ x7-E3950 processor
- Tripe video output (HDMI/DP support 4K2K resolution)
- Compact and slim design (H: 21.5mm)
- Wide temperature support
- Supports W-Fi, GPS, and 3G module
- Fanless design

Product Overview

Powered by new generation Intel® Atom™ x7-E3950 processor, NDiS B336R series digital signage player can handle very rich multimedia contents. With Intel® processor low power consumption feature, In addition, the 6th generation Intel® Core™ processors deliver significant improvements up to two and a half times the performance in graphics offering stunning visuals for compelling 4K content creation and media playback. NDiS B36R series supports display output by HDMI and DP ports is ideal as entry level digital signage player, NDiS B336R series The slim/fanless design with wide temperature durability further extends to semi-outdoor usage like QSR drive through kiosks, box office displays, information stands, bus stops, or digital transit information signs. It is also ideal as a digital signage player delivering enhanced performance and new immersive experiences for advertising, hospitality and brand promotion applications.

Specifications

CPU Support
- Quad core Intel® Atom™ x7-E3950 processor, 2.0GHz

Chipset
- SoC (codenamed Apollo Lake-I)

Graphics
- Intel® HD Graphics 500 series

Main Memory
- 2 x 204-pin SO-DIMM socket, supports DDR3L 1600MHz non-ECC, Un-buffered memory up to 16GB

I/O Interface-Front
- 1 x 19V DC in
- 1 x DB9 for RS-232
- 1 x RJ45 with LEDs 10/100/1000Mbps Ethernet
- 2 x USB3.0
- 1 x Display Port
- 2 x HDMI Port
- 1 x HDD LED
- 1 x Power Switch

I/O Interface-Rear
- 2 x Antenna Hole for Wi-Fi or TV Tuner
- 3 x USB3.0
- 1 x Audio-out
- 1 x MIC-in

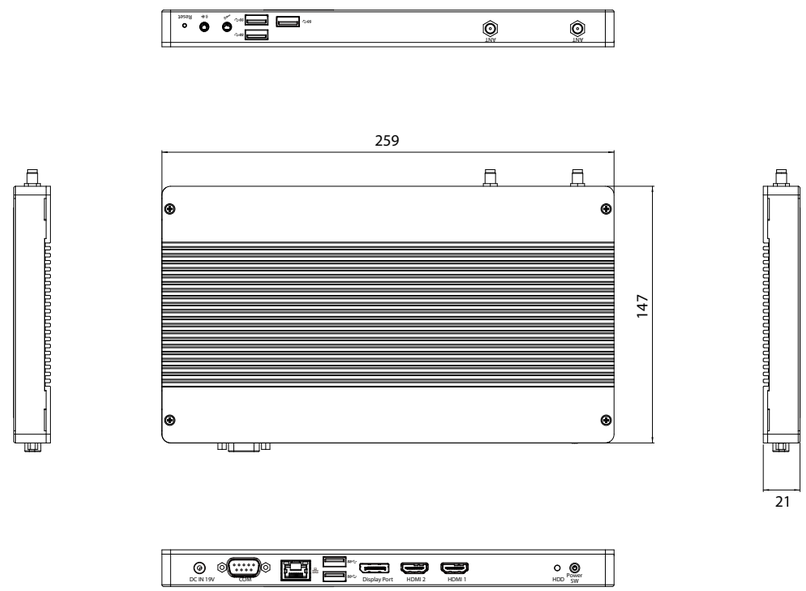
Storage
- 1 x SATA 2.5”

Expansion
- 1 x mini-PCIe slot (full size)
- 1 x NGFF (M.2) 2230 for optional WLAN
- 1 x SIM Slot

Power Supply
- 1 x external 65W AC/DC power adapter
- Input: 100VAC to 240VAC
- Output: DC+19VDC

Environment
- Operating temperature: -10°C to 60°C (SSD) ; 0°C to 40°C (HDD)
- Storage temperature: -25°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing



Certification
- CE approval
- FCC Class A

Dimensions
- 259mm (W) x 147mm (D) x 21mm (H)

Operating System
- Win10/Linux

Ordering Information

- **NDiS B336R (P/N: 10W00B33600X0)**
  Quad core Intel® Atom™ x7-E3950 slim and fanless system

NDiS B533

Fanless Embedded Computer Powered by 4th Gen. Intel® Core™ Processor, Support Dual Full HD Video Playback

Main Features

- 4th Generation Intel® Core™ processor
- Intel® integrated HD 4600 graphic engine
- Compact and Slim Design
- 3 Independent display
- USB 3.0, Dual GbE LAN support
- WLAN/TV tuner support
- DirectX® 11.1 support

Product Overview

NDiS B533 is a powerful digital signage player which is built around the superb technology of 4th generation Intel® Core™ processor family series and Q87 integrated graphics controller. The digital signage player can offer impressive system performance and full HD videos. With support for smooth 1080P video playback on three independent displays, the 1080P signage player can fully satisfy customer's expectation and therefore be used in applications such as advertising, hospitality, brand promotion and digital menu board.

Specifications

CPU Support
- 4th generation Intel® Core™ LGA socket type processor

Chipset
- Intel® Q87
- Intel® integrated HD4600 graphic engine

Main Memory
- 2 x 204-pin SO-DIMM sockets , Supports DDR3 1600/1333MHz non-ECC, un-buffered memory up to 16GB (single socket max. 8GB)

I/O Interface-Front
- 1 x Power status LED
- 1 x HDD status LED
- 1 x Power switch
- 1 x Reset switch
- 2 x USB 3.0
- 2 x DB9 for RS-232

I/O Interface-Rear
- +12V DC-in
- 3 x HDMI
- 2 x USB 3.0
- 2 x RJ45 with LED for 10/100/1000Mbs Ethernet
- 1 x SPDIF
- 1 x Line-in/1x Line-out
- 3 x antenna hole for Wi-Fi and TV tuner

Storage
- 1 x SATA 2.5" HDD
- 1 x SATA DOM

Expansion
- 1 x mini-PCIe for optional WLAN module
- 1 x mini-PCIe for optional TV tuner module

Data Protection
- 1 x Wafer on board for TPM module (ver. 1.2), support Intel® Trusted Execution Technology

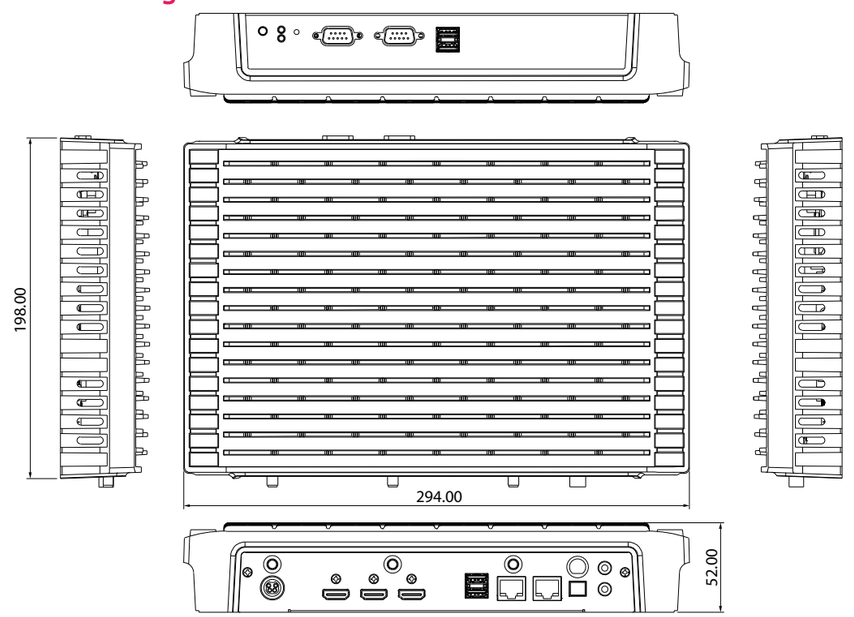
Construction
- Top cover made by aluminum for main heat exchange
- Chassis made by steel in black

Dimensions
- 294mm (W) x 198mm (D) x 52mm(H) (11.6" x 7.8" x 2.0")

Power Supply
- 1 x External 80W AC/DC adapter
  Input: 100 ~ 240VAC
  Output: +12VDC

Environment
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing



Certification
- CE approval
- FCC Class A

Operating System
- Win7/Win8/Win10

Ordering Information

- **NDiS B533 (P/N: 10W00B53300X0)**
  4th generation Intel® Core™ processor (up to 35W) fanless system, Intel® Q87 chipset
- **NDiS B533F (P/N: 10W00B53301X0)**
  4th generation Intel® Core™ processor (up to 45W) system, Intel® Q87 chipset
- **NDiS-WALL Mount Kit For NDiS B532/B533/B535 (P/N: 10W00NDIS00X0)**

NDiS B535

Fanless Embedded Computer Powered by
6th Generation Intel® Core™ Processor, Support 4K2K Video Playback

Microsoft Azure
Certified

Main Features

- 6th Generation Intel® Core™ processor
- Intel® integrated HD 530 graphic engine
- Support 3 independent 4K2K 60Hz video out
- USB3.0 x 6, RS-232 x 4, Dual GbE LAN support
- NGFF type storage and WLAN support
- DirectX® 12 support
- Fan less design

Product Overview

NDiS B535 is a powerful digital signage player which is built around the superb technology of 6th generation Intel® Core™ processor family series and Intel® 100 Series chipset integrated graphics controller. The digital signage player can offer impressive system performance and full HD videos. With support for 4K2K video playback on three independent displays, the 4K2K signage player can fully satisfy customer's expectation and therefore be used in applications such as advertising, hospitality, brand promotion and digital menu board.

Specifications

CPU Support
- 6th generation Intel® Core™ LGA socket type processor

Chipset
- Intel® 100 Series chipset
- Intel® integrated HD 530 graphic engine

Main Memory
- 2 x 260-pin SO-DIMM Sockets, Supports DDR4 1866/2133 MHz non-ECC, un-buffered memory up to 32G (Single socket max. 16GB)

I/O Interface-Front
- 1 x Power status LED
- 1 x HDD status LED
- 1 x Power switch
- 1 x Reset switch
- 2 x USB3.0
- 4 x DB9 for RS-232

I/O Interface-Rear
- +12V DC-in
- 3 x HDMI 2.0
- 4 x USB3.0
- 2 x RJ45 with LED for 10/100/1000Mbs Ethernet
  I219 LAN supports IAMT and PXE
  I210 LAN supports PXE
- 1 x Min-in/1x Line-out
- 3 x Antenna hole for Wi-Fi and TV tuner

Storage
- 1 x SATA 2.5" HDD/SSD
- 1 x NGFF (M.2) SSD card slot (support 22x42, 22x80)

Expansion
- 1 x mini-PCIe for optional WLAN/TV tuner module
- 1 x NGFF (M.2) E key for optional WLAN
- 1 x SIM Slot

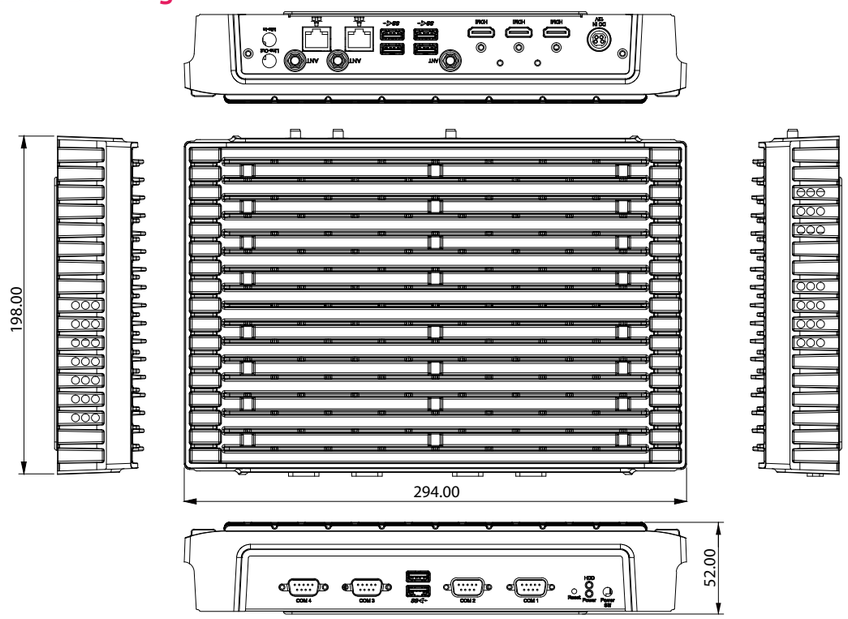
Construction
- Top cover made by aluminum for main heat exchange
- Chassis made by steel in black

Dimensions
- 294mm (W) x 198mm(D) x 52mm (H) (11.6" x 7.8" x 2.0")

Power Supply
- 1 x External 96W AC/DC adapter
  Input: 100~240VAC
  Output: +12VDC

Environment
- Operating temperature: 0°C to 40°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing



Certification
- CE/FCC Class A

Operating System
- Win7 (32/64bit)/Win8.1 (64bit)/Win10 (64bit)

Ordering Information

- **NDiS B535 (P/N: 10W00B53500X0)**
  6th generation Intel® Core™ processor (up to 35W) fanless system, Intel® 100 Series chipset
- **NDiS-WALL Mount Kit For NDiS B532/B533/B535 (P/N: 10W00NDIS00X0)**

NDiS B537

Fanless Embedded Computer

Powered by 7th Generation Intel® Core™ Processor

Main Features

- 7th Generation Intel® Core™ processor
- Support HDMI 2.0 output (4K2K/60Hz support)
- Compact and slim design (H: 33mm)
- Support socket type CPU up to 35W
- NGFF/mini-PCie slot support Wi-Fi and 4G module
- Fanless design

Product Overview

Powered by the 7th generation Intel® Core™ processor, the NDiS B537 Series fanless embedded player can handle powerful multimedia content. In addition, the 7th generation Intel® Core™ processor delivers up to two-and-a-half times the performance in graphics, offering stunning visuals for striking 4K entertaining content creation, media playback, and image processing. The NDiS B537 Series manages in-store traffic analytics, simultaneously engaging “calls to action” with virtual interactions in order to increase product interest and dwell time.

The NDiS B537 Series, supporting multiple Display Port ,HDMI 2.0 displays and USB 3.0 ports, and a RS232 interface, is an ideal high-end embedded player to optimize information visualization, convey brand messages, customer engagement, and smart retail management efficiencies to increase in-store traffic and sales. The slim fanless design with extended durability further covers usages like endless aisles, QSRs, drive-thru kiosks, bus stops, digital transit information signs, and information stands.

Specifications

CPU Support
- 7th Gen Intel® Core™ socket type processor up to 35W

Chipset
- Intel® PCH H110 (B537)
- Intel® PCH Q170 (B537-I)

Graphics
- Intel® HD Graphics 600 series

Main Memory
- 2 x 260-pin SO-DIMM sockets, supports DDR4 1866/2133 MHz Non ECC, un-buffered memory up to 32G (single socket max. 16GB)

I/O Interface-Front
- 1 x Power button with LED
- 1 x Power LED/ HDD LED
- 2 x USB 3.0
- 1 x HDMI 2.0, 1 x HDMI 1.4
- 1 x DisplayPort (B537-I only)
- 1 x RJ45 with LEDs for Gigabit LAN (2 x RJ45 for B537-I only)
- 2 x COM port
- 1 x 4-pin mini-Din with Lock

Storage
- 1 x SATA 2.5” HDD/SSD

I/O Interface-Rear
- 2 x USB 3.0
- 3 x Antenna hole
- 1 x MIC-in
- 1 x Line-out

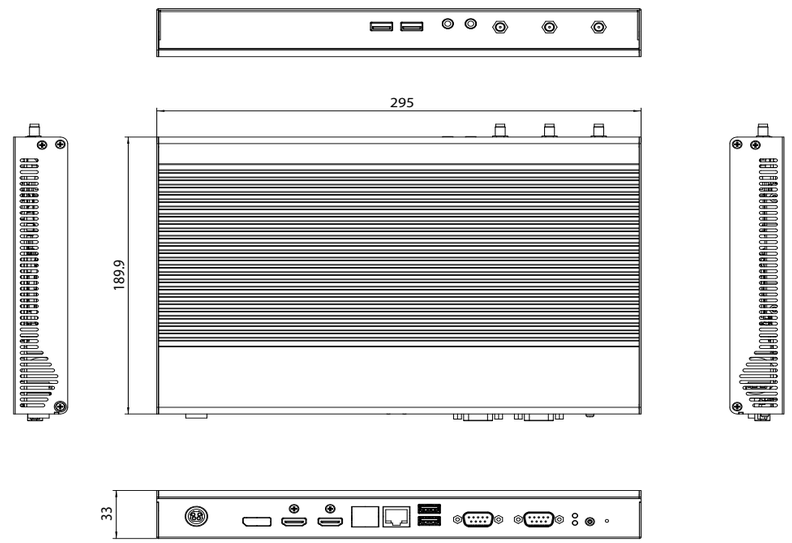
Expansion
- 1 x mini-PCIe slot (full size)
- 1 x NGFF (M.2) 2230 for optional WLAN
- 1 x SIM slot

API
- NEXCOM Xcare

Power Supply
- 1 x External 96W AC/DC power adapter
- Input: 100VAC to 240VAC
- Output: DC+12VDC

Environment
- Operating temperature: -10°C to 45°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing



Certification
- CE Approval
- FCC Class B

Dimensions
- 295mm (W) x 189.9mm (D) x 33mm (H)

Operating System Support
- Win10/Linux

Ordering Information

- **NDiS B537 (P/N: 10W00B53700X0)**
  7th Generation Intel® Core™ processor slim and fanless system
- **NDiS B537-I (P/N: 10W00B53701X0)**
  7th Generation Intel® Core™ processor with Q170 slim and fanless system

NDiS B866

Multi-Display Embedded Computer Powered by
6th Gen. Intel® Core™ Processor with Discrete AMD RADEON™ E8870 GPU

Main Features

- 6th generation Intel® Core™ processor
- AMD RADEON™ E8870 EMBEDDED GPU
- 6 HDMI Output (4K2K resolution support)
- Compact 1U chassis design
- Removable dual HDD tray supporting RAID 0, 1

Product Overview

NDiS B866 is specifically designed to address the need for application to present high quality contents on video wall, central control room, and multi-display applications. NDiS B866 provides 6 independent HDMI and 6 x USB3.0 and dual GbE Ethernet with optional WLAN. Powered by the 6th generation Intel® Core™ processor and discrete AMD E8870 GPU, NDiS B866 can smoothly playback multiple 4K video clips. NDiS B866 is an advanced media player for any applications to demonstrate high quality and high impact contents over multiple displays.

Specifications

CPU Support
- 6th generation Intel® Core™ LGA socket type processor (up to 65W)

Chipset
- Intel® PCH Q170

Graphics
- AMD RADEON™ E8870 EMBEDDED GPU

Main Memory
- 4 x 260-pin SO-DIMM socket, Supports DDR4 1866/2133 MHz non-ECC, Un-buffered memory up to 64GB

I/O Interface-Front
- 1 x Power Switch with LED (Blue)
- 1 x HDD LED (Red)/Power LED (Green)
- 2 x USB3.0
- 2 x DB9 for RS-232
- 1 x HDMI input Port (Optional)
- 1 x Reset onboard push button
- 6 x 2 HDMI plug status LED (Green plugged, Red unplugged)

I/O Interface-Rear
- 1 x Line-out
- 1 x Mic-in
- 1 x SPDIF
- 4 x USB3.0
- 2 x RJ45 with LEDs 10/100/1000Mbps Ethernet
- 6 x HDMI 1.4 (six 3840 x 2160 @ 30Hz in clone/ extended desktop mode)
- 1 x AC power inlet
- 3 x Antenna hole for Wi-Fi or TV tuner

Storage
- 2 x SATA 2.5"
- 2 x NGFF (M key), support 2242,2280

Expansion
- 1 x mini-PCIe slot (full size)
- 1 x NGFF (E key), support 1630/2230 for optional WLAN
- 2 x SIM Slot

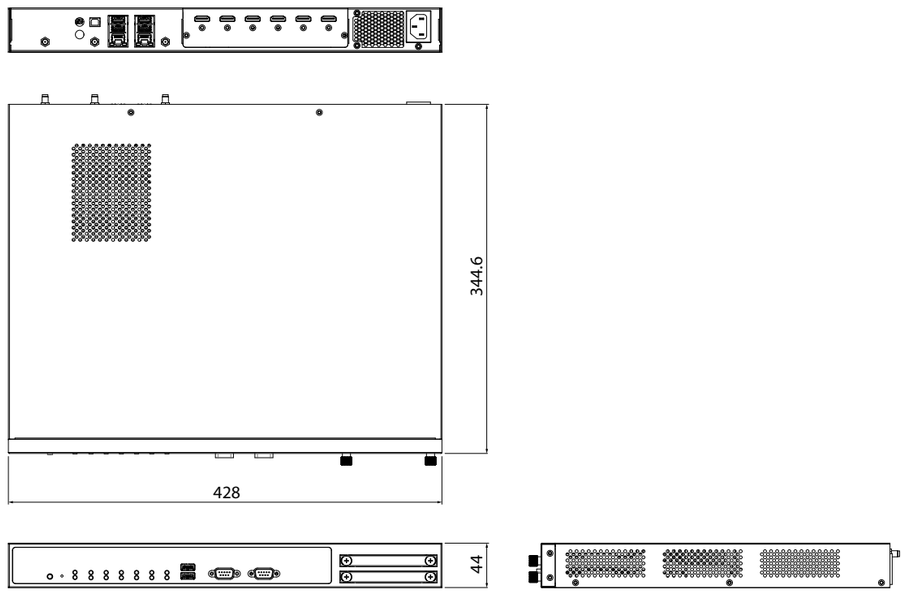
Dimensions
- 428mm (W) x 344mm (D) x 44mm (H)

Power Supply
- 1 x internal 250W power supply with active PFC (Power Factor Correction), Input: 115VAC~230VAC

Environment
- Operating temperature: 0°C to 40°C
- Storage temperature: -40°C to 80°C
- Humidity: 10 to 95% (non-condensing)

Operating System Support
- Win10/Linux

Dimension Drawing



Certification
- CE approval
- FCC Class A

Video Wall Supported Matrix

Number of Display	Grid Configuration
2	1 x 2
2	2 x 1
3	1 x 3
3	3 x 1
4	2 x 2
4	1 x 4
4	4 x 1
5	1 x 5
5	5 x 1
6	1 x 6
6	6 x 1
6	2 x 3
6	3 x 2

Ordering Information

- **NDiS B866 (P/N: 10W00B86600X0)**
  6 HDMI Ports Multi-Display Embedded Computer

NDiS M324

Embedded Computer Powered by Intel® Celeron® Processor J1900
OPS Digital Signage Platform, Support Remote Management

Main Features

- Intel® Celeron™ processor J1900
- Integrated Intel® Gen. 7 graphics
- Dual SO-DIMM slots for up to 8GB of DDR3L 1333 memory
- WWAN/WLAN/TV tuner support
- Remote management
- Comply with Open Pluggable Specification (OPS)
- Fanless design

Product Overview

NDiS M324 is based on Intel® Celeron® Processor J1900 (formerly codenamed "Bay Trail") and follows the electrical and mechanical specifications of the Open Pluggable Specification (OPS). NDiS M324 can be plugged into any OPS-complaint display devices to render rich multimedia contents. Thanks to the modular and cable-less, NDiS M324 satisfies the need for quick deployment and hassle-free maintenance of large digital signage network dispersed in different geographical locations. NDiS M324 is powered by the Intel® Celeron® Processor J1900. The digital signage player has an integrated Intel® Gen.7 graphic engine and supports Microsoft DirectX 11. Taking advantage of the latest Intel® technology, NDiS M324 can accelerate, 3D rendering, image processing and video decoding to provide highly personalized information base on the result of audience measurement to deliver accurate marketing message to target audience.

Specifications

CPU Support
- Intel® Celeron® processor J1900 quad core 2.0GHz SoC processor

Graphic
- Integrated Intel® Gen. 7 graphics

Main Memory
- 2 x 204-pin SO-DIMM socket, support DDR3L 1333 MHz with un-buffered and non-ECC SDRAM up to 8GB

I/O Interface-Front
- 1 x Power button
- 1 x Reset button
- 1 x HDD LED
- 3 x USB 3.0
- 1 x USB 2.0
- 1 x HDMI
- 1 x Mic-in
- 1 x Line-out
- 1 x 2.5" HDD slot
- 1 x RJ45 with LEDs for Gigabit LAN
- 2 x Antenna hole

I/O Interface-Rear
- 1 x TMDS
- 1 x UART
- 1 x Audio out L/R
- 2 x USB 2.0
- 1 x USB 3.0
- DC input 12V ~ 19V
- Control signals (PWR_STATUS, PS_ON#, PB_DET, CEC, SYS_FAN)

Storage Device
- 1 x 2.5" SATA storage bay for HDD/SSD

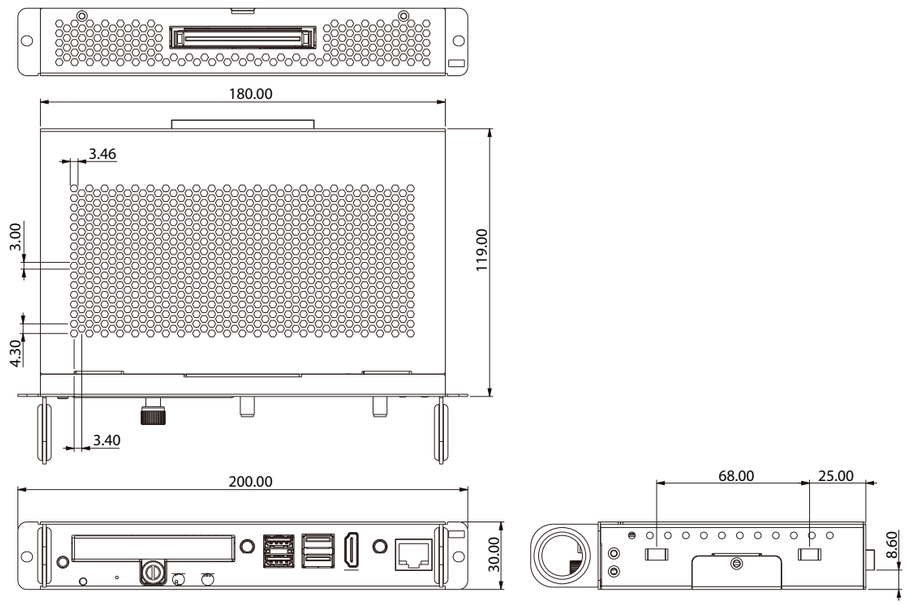
Expansion
- 1 x mini-PCI for optional WLAN/TV tuner module
- 1 x SIM slot

Dimensions
- 200mm (W) x 119mm (D) x 30mm (H) (7.8" x 4.7" x 1.1")

Power Power Supply
- DC power input +12V ~ +19V

Environment
- Operating temperature:
  Ambient with air flow from 0°C to 45°C (with HDD)
  Ambient with air flow from 0°C to 45°C (with SSD)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing



Certification
- CE approval
- FCC Class A

Operating System
- Win7/Win8/WES7/WE8S/Linux

Ordering Information

- **NDiS M324 (P/N: 10W00M32400X0)**
  Intel® Celeron® J1900 processor SoC OPS

NDiS M335

Embedded Computer Power by Intel® Celeron® N3160
OPS Digital Signage Platform

Main Features

- Intel® Celeron® processor N3160
- Integrated Intel® HD graphics
- Support 4K2K video out
- Dual SO-DIMM slots for up to 8GB of DDR3L 1600 memory
- WWAN/WLAN/TV tuner support
- 2.5" HDD/SSD and NGFF dual storage

Product Overview

NDiS M335 OPS player, which follows the electrical and mechanical specifications of the Open Pluggable Specification (OPS), is based on Intel® Celeron® Processor N3160 (formerly condenamed "Braswell"). NDiS M335 can be plugged into any OPS-complaint display devices to render rich multimedia contents. Thanks to the modular and cable-less, NDiS M335 OPS player satisfies the need for quick deployment and hassle-free maintenance of large digital signage network dispersed in different geographical locations.

Powered by future generation Intel® processor, the NDiS M335 OPS player with integrated new Intel® graphic engine can support 4K2K and Microsoft DirectX 11.1. Taking advantage of the latest Intel® technology, NDiS M335 can accelerate 3D rendering, image processing and video decoding to provide targeted audience highly personalized information base on the result of audience measurement to deliver accurate marketing messages.

Specifications

CPU Support
- Intel® Celeron® processor N3160 quad core 1.6GHz SoC processor

Graphic
- Integrated Intel® HD graphics

Main Memory
- 2 x 204 pin SO-DIMM socket, support DDR3L 1600MHz with un-buffered and non-ECC SDRAM up to 8GB

I/O Interface-Front
- 1 x Power button
- 1 x Reset button
- 1 x HDD LED
- 2 x USB3.0
- 2 x USB2.0
- 2 x HDMI (HDMI2 support 4K2K output)
- 1 x Mic-in
- 1 x Line-out
- 1 x 2.5" HDD/SSD slot
- 1 x RJ45 with LEDs for Gigabit LAN
- 2 x Antenna hole

I/O Interface-Rear
- 1 x TMDS
- 1 x Audio out L/R
- 2 x USB2.0
- 1 x USB3.0
- DC input +12V~+19V
- Control signals (PWR_STATUS, PS_ON#, PB_DET, CEC, SYS_FAN)

Storage Device
- 1 x 2.5" SATA storage bay for HDD/SSD
- 1 x NGFF (M2) B key slot, support 2242 SSD, SATA interface

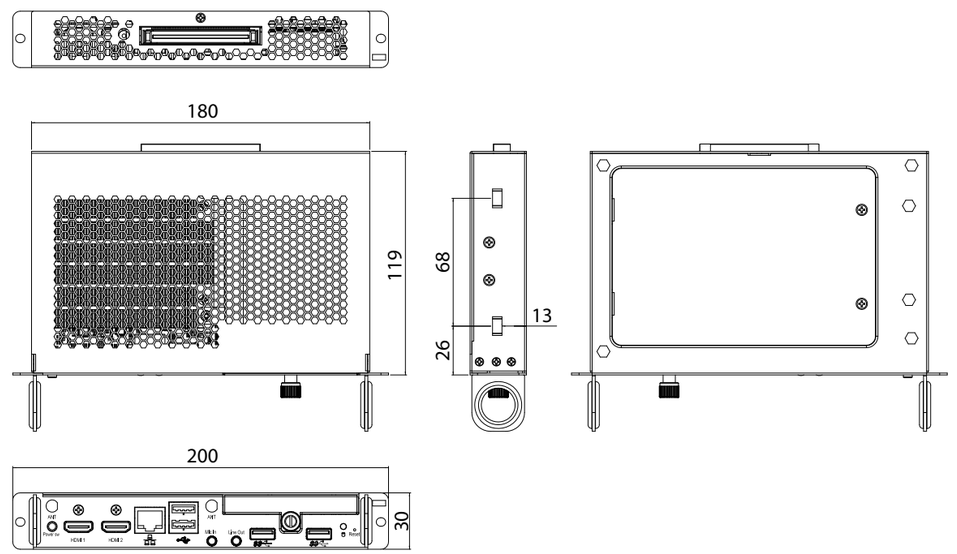
Expansion
- 1 x mini-PCIe for optional WWAN/WLAN/TV tuner module
- 1 x SIM slot

Dimensions
- 200mm (W) x 119mm (D) x 30mm (H) (7.8" x 4.7" x 1.1")

Power Power Supply
- 1 x DC power input +12v ~ +19V

Environment
- Operating temperature:
  Ambient with air flow from 0°C ~ 45°C
- Storage temperature: -20°C ~ 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing



Certification
- CE approval
- FCC Class A

Operating System
- Win 7/WES7/Win8.1(64-bit)/Win10/WE8S/Linux

Ordering Information

- **NDiS M335 (P/N: 10W00M33500X0)**
  Intel® Celeron® N3160 processor SoC OPS

NDiS M533

Embedded Computer Powered by 4th Gen. Intel® Core™ Processor
OPS-based Digital Signage Platform, Support 4K Resolution

Main Features

- 4th generation Intel® Core™ i3/i5/i7 processor family
- Intel® HD Graphics with DirectX® 11.1 support
- Dual DDR3L SO-DIMM support
- WWAN/WLAN/TV Tuner support
- Support for Intel® AMT9.0
- 4K resolution support

Product Overview

NDiS M533 is an OPS-compliant media player powered by 4th generation Intel® Core™ processors. Following open pluggable standard, NDiS M533 can perfectly fit into a myriad of OPS-panels and is compact in size. Yet, NDiS M533 has high scalability, allowing for easy storage capacity expansion through pluggable 2.5" storage unit and effortless functional extension through Mini Card expansion modules. Changing system memory is also made simple. In addition, NDiS M533 leverages the 4th generation Intel® Core™ processors to deliver outstanding graphics whilst limiting the power usage. The superb but power-efficient NDiS M533 can therefore maximize visual impacts for digital signage applications.

Specifications

CPU Support
- 4th generation Intel® Core™ i3-4100E BGA type processor
- 4th generation Intel® Core™ i5-4400E BGA type processor
- 4th generation Intel® Core™ i7-4700EQ BGA type processor

Chipset
- Intel® QM87

Graphic
- Intel® integrated HD 4600

Main Memory
- 2 x 204-pin SO-DIMM socket, support DDR3L 1600 MHz with un-buffered and non-ECC SDRAM up to 16GB

I/O Interface-Front
- 1 x Power button
- 1 x Reset button
- 1 x HDD LED
- 4 x USB 3.0
- 1 x HDMI (for NDiS M533)
- 1 x DisplayPort (for NDiS M533-D)
- 1 x Mic-in/Line-out
- 1 x 2.5" HDD slot
- 1 x RJ45 with LEDs for Gigabit LAN
- 1 x RJ45 for RS-232
- 2 x Antenna hole

I/O Interface-Rear
- 1 x TMDS
- 1 x DisplayPort
- 1 x UART
- 1 x Audio out L/R
- 2 x USB 2.0
- 1 x USB 3.0
- DC input +12V ~ +19V
- Control signals (PWR_STATUS, PS_ON#, PB_DET, CEC, SYS_FAN)

Storage Device
- 1 x 2.5" SATA storage bay for HDD/SSD

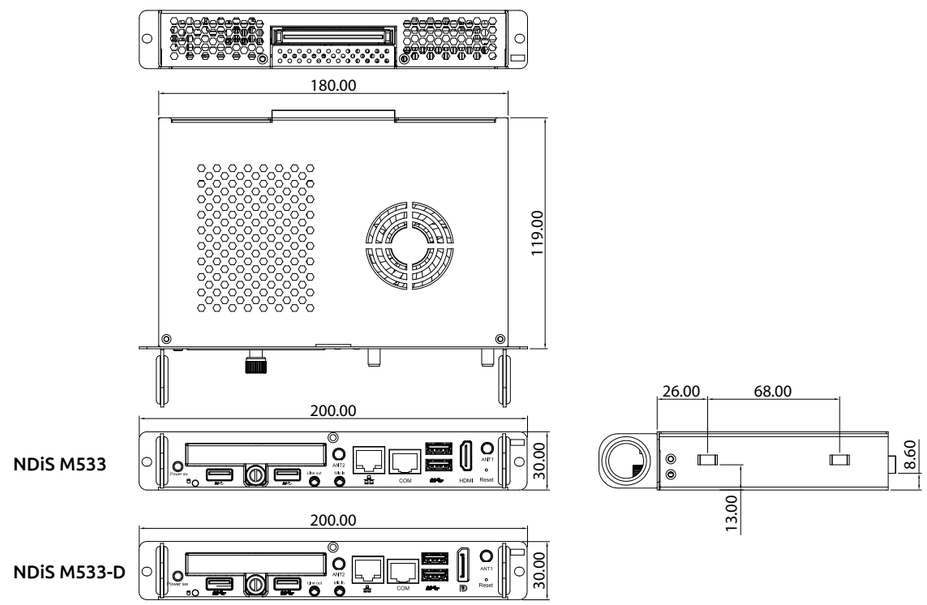
Expansion
- 1 x mini-PCIe for optional WLAN/TV tuner module
- 1 x SIM slot

Dimensions
- 200mm (W) x 119mm (D) x 30mm (H) (7.8" x 4.7" x 1.1")

Power Power Supply
- DC power input +12V ~ 19V

Environment
- Operating temperature: ambient with air flow from 0°C to 45°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Dimension Drawing



Certification
- CE approval
- FCC Class A
- ENERGY STAR Computer Version 7.0 approval

Operating System
- Win7/Win8/WES7/WES8/Win10/Linux

Ordering Information

- **NDiS M533 (P/N: 10W00M53300X0)**
  4th generation Intel® Core™ i5-4400E BGA type processor OPS, Intel® QM87 chipset
- **NDiS M533-4100E (P/N: 10W00M53302X0)**
  4th gerneration Intel® Core™ i3-4100E BGA type processor OPS, Intel® QM87 chipset
- **NDiS M533-4700EQ (P/N: 10W00M53305X0)**
  4th gerneration Intel® Core™ i7-4700EQ BGA type processor OPS, Intel® QM87 chipset
- **NDiS M533-D (P/N: 10W00M53301X0)**
  4th gerneration Intel® Core™ i5-4400E BGA type processor OPS, Intel® QM87 chipset
- **NDiS M533-4720HQ (P/N: 10W00M53308X0)**
  4th gerneration Intel® Core™ i7-4720HQ BGA type processor OPS, Intel® QM87 chipset, w/o V-Pro
- **NDiS M533-4210H (P/N: 10W00M53306X0)**
  4th gerneration Intel® Core™ i5-4210H BGA type processor OPS, Intel® QM87 chipset, w/o V-Pro

NDiS M535

Embedded Computer Powered by 6th Gen. Intel® Core™ Processor
OPS-Based Digital Signage Platform, Support 4K (HDMI 2.0) Resolution

Main Features

- 6th generation Intel® Core™ processor
- Intel® integrated HD 530 graphic engine
- Support 3 independent 4K2K video out
- Dual DDR4 SO-DIMM support
- WWAN/WLAN/TV Tuner support
- DirectX® 12 support

Product Overview

NDiS M535 is an OPS-compliant media player powered by 6th generation Intel® Core™ processors. Following open pluggable standard, NDiS M533 can perfectly fit into a myriad of OPS-panels and is compact in size. Yet, NDiS M535 has high scalability, allowing for easy storage capacity expansion through pluggable 2.5" storage unit and effortless functional extension through Mini Card expansion modules. Changing system memory is also made simple. In addition, NDiS M535 leverages the future generation Intel® Core™ processors to deliver outstanding graphics support 3 independent 4K2K video output. The superb but power-efficient NDiS M535 can therefore maximize visual impacts for digital signage applications.

Specifications

CPU Support
- 6th generation Intel® Core™ i5-6440EQ 2.7GHz BGA type processor
- 6th generation Intel® Core™ i7-6820EQ 2.8GHz BGA type processor

Chipset
- Intel® QM170 PCH

Graphic
- Intel® intergrated HD 530 graphics

Main Memory
- 2 x 260-pin SO-DIMM sockets, supports DDR4 1866/2133 MHz non-ECC, un-buffered memory up to 32G (single socket max. 16GB)

I/O Interface-Front
- 1 x Power button with LED
- 1 x Reset button
- 1 x RJ45 with LEDs for Gigabit LAN
- 1 x HDMI 2.0 (A type), 1 x mini DP
- 2 x USB 3.0
- 1 x 2.5" HDD/SSD slot
- 1 x HDD Active LED
- 2 x Antenna hole
- 1 x Mic-in phone jack
- 1 x Line-out phone jack

I/O Interface-Rear
- 1 x TMDS (HDMI)
- 1 x USB 3.0
- 2 x USB 2.0
- 1 x UART (TX/RX)
- 1 x Audio out L/R
- DC input +12V~+19V
- Control signals (PWR_STATUS, PS_ON#, PB_DET, CEC, SYS_FAN)

Storage Device
- 1 x SATA 2.5" HDD/SSD

Expansion
- 1 x mini-PCIe for optional WLAN/TV tuner module
- 1 x Micro SIM Slot

Dimensions
- 200mm (W) x 119mm (D) x 30mm (H) (7.8" x 4.7" x 1.1")

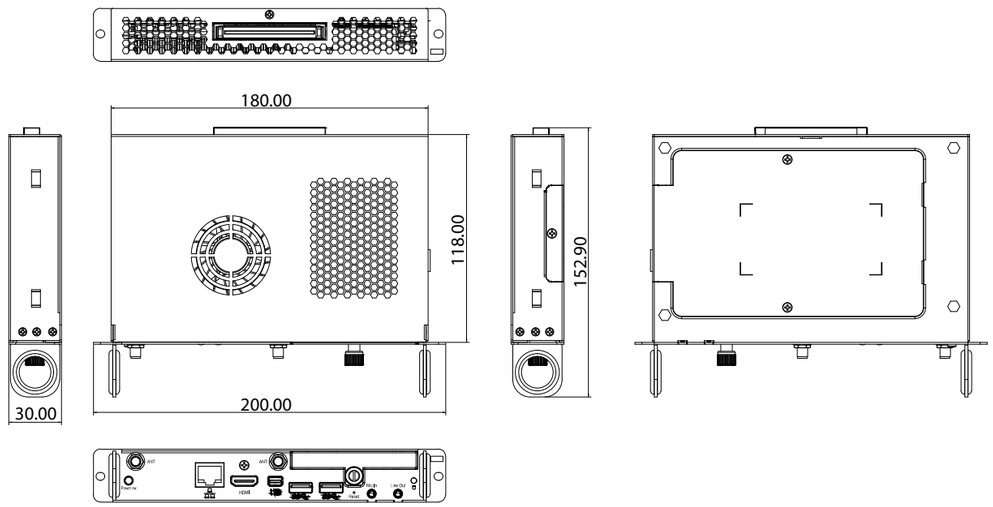
Power Power Supply
- DC power input +12V ~ +19V

Environment
- Operating temperature: ambient with air flow from 0°C to 45°C
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)

Certification
- CE/FCC Class A

Operating System
- Win7 32/64-bit, Win8.1 64-bit, Win10 64bit

Dimension Drawing



Ordering Information

- **NDiS M535 (P/N: 10W00M53500X0)**
  6th generation Intel® Core™ i5-6440EQ BGA type processor OPS, Intel® QM170 chipset
- **NDiS M535-6820EQ (P/N: 10W00M53501X0)**
  6th generation Intel® Core™ i7-6820EQ BGA type processor OPS, Intel® QM170 chipset

NDiS M537

Embedded Computer Powered by 7th/6th Gen. Intel® Core™ Processor
OPS PLUS-Based Digital Signage Platform, Support 4K Resolution

Main Features

- 7th/6th generation Intel® Core™ processor
- Intel® integrated HD 630 graphic engine
- Support 3 independent 4K2K video out
- Dual DDR4 SO-DIMM support
- Support Wi-Fi module
- DirectX® 12 support

Product Overview

NDiS M537 is an OPS PLUS-compliant media player powered by 7th/6th generation Intel® Core™ processors. Following open pluggable standard, NDiS M537 can perfectly fit into a myriad of OPS PLUS-panels and is compact in size. Yet, NDiS M537 has high scalability, allowing for easy storage capacity expansion through pluggable M.2 storage unit and effortless functional extension through FX18-60P (PCIe x4, DP1.2) expansion modules. Changing system memory is also made simple. In addition, NDiS M537 leverages the future generation Intel® Core™ processors to deliver outstanding graphics support 3 independent 4K2K video output. The superb but power-efficient NDiS M537 can therefore maximize visual impacts for digital signage applications.

Specifications

CPU Support
- 7th generation Intel® Core™ processor (LGA1151), 35W
- 6th generation Intel® Core™ processor (LGA1151), 35W

Chipset
- Intel® Q170 PCH

Graphic
- Intel® integrated HD 630 graphics

Main Memory
- 2 x 260-pin SO-DIMM sockets, supports DDR4 2133/2400 MHz non-ECC, un-buffered memory up to 32G (single socket max. 16GB)

I/O Interface-Front
- 1 x Power button with LED
- 1 x Reset button
- 1 x RJ45 with LEDs for Gigabit LAN
- 1 x Mini DP connector for DisplayPort++
- 2 x USB 3.0
- 1 x Storage active LED
- 2 x Antenna hole
- 1 x Mic-in phone jack
- 1 x Line-out phone jack
- 1 x DB9 for RS232 (COM3)

I/O Interface-Rear (TX25)
- 1 x TMDS (HDMI 2.0)
- 1 x USB 3.0
- 2 x USB 2.0
- 1 x UART (3.3V TTL) (COM2)
- 1 x Audio out L/R
- DC input +12V~+19V
- Control signals (PWR_STATUS, PS_ON#, PB_DET, CEC, SYS_FAN)

I/O Interface-Rear (FX18)
- 1 x GPIO signal
- 2 x I2C signal
- LAN managements signals
- 1 x DP1.2 signal
- PCIe x4 signal

Storage Device
- 1 x M.2 2242, SATA signal

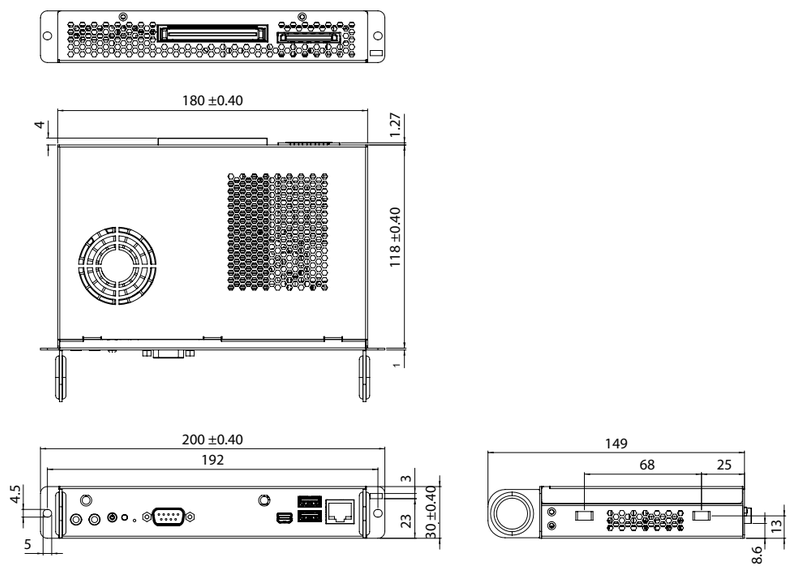
Expansion
- 1 x M.2 2230 for optional Wi-Fi module

Dimensions
- 200mm (W) x 119mm (D) x 30mm (H) (7.8" x 4.7" x 1.1")

Power Power Supply
- DC power input +12V~+19V

Environment
- Operating temperature: ambient with air flow from 0°C to 45°C
- Storage temperature: -20°C to 80°C
- Humidity: 95% (non-condensing)

Dimension Drawing



Certification
- CE/FCC Class A

Operating System
- 7th generation Intel® Core™
  - Win10 64-bit
- 6th generation Intel® Core™
  - Win7 32/64-bit
  - Win10 64-bit

Ordering Information

- **NDiS M537 (P/N: 10W00M53700X0)**
  7th/6th generation Intel® Core™ LGA1151 type processor OPS PLUS, Intel® Q170 chipset

NDiS S538

Embedded Computer Powered by 6th Gen. Intel® Core™ Processor
SDM-L Based Digital Signage Platform, Support 4K Resolution

Smart Display Module

Main Features

- SDM-L (Smart Display Module - Large) design in
- 6th generation Intel® Core™ Skylake processor
- Intel® integrated HD 530 graphic engine
- Support 3 independent 4K2K video out
- Dual DDR4 SO-DIMM support
- Support Wi-Fi module

Product Overview

NDiS S538 is designed for thinner and power efficiency display. There is no housing to limit display size and also easyly integrate in signage player. NDiS S538 can be spanned from Celeron to Core™ processor and support All-in-One signage, interactive media player, and video wall. Also, allowing for easy storage capacity expansion through pluggable M.2 storage unit.

In addition, NDiS S538 leverages the 6th gen. Intel® Core™ processors to deliver outstanding graphics support 3 independent 4K2K video output. The superb but power-efficient can therefore maximize visual impacts for digital signage applications.

Specifications

CPU Support
- 6th generation Intel® Core™ processor (LGA1151), 35W

Chipset
- Intel® Q170 PCH

Graphic
- Intel® integrated HD 530 graphics

Main Memory
- 2 x 260-pin SO-DIMM Sockets, Supports DDR4 2133/2400 MHz non-ECC, un-buffered memory up to 32G (Single socket max. 16GB)

I/O Interface-Front
- 1 x Power button with LED
- 1 x Reset button
- 1 x RJ45 with LEDs for Gigabit LAN
- 1 x Mini DP ++
- 4 x USB 3.0
- 2 x Antenna hole

I/O Interface-Rear (PCIe x8)
- 1 x HDMI1.4 signal
- 1 x DP1.2 signal
- 2 x I2C, master and slave ports signal
- 1 x GSPI signal
- 1 x PCIe by 1 signal
- System management

Storage Device
- 1 x M.2 2280, PCIe x4 + SATA

Expansion
- 1 x M.2 2230 for optional Wi-Fi module

Dimensions
- 175mm (W) x 100mm (D) x 20mm (H)

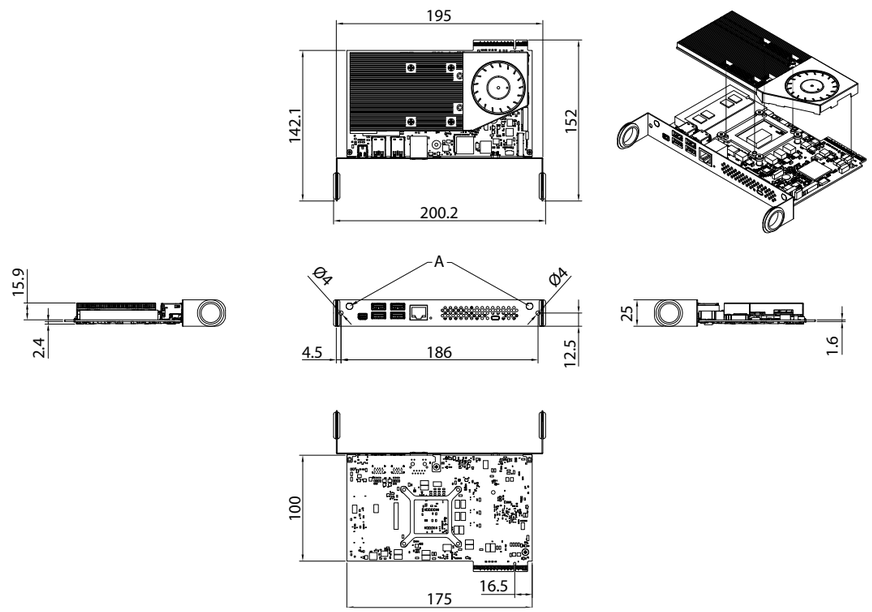
Power Power Supply
- DC power input +12V

Environment
- Operating temperature: ambient with air flow from 0°C to 55°C
- Storage temperature: -10°C to 70°C
- Humidity: 95% (non-condensing)

Certification
- CE/FCC Class A

Operating System
- Win10 64-bit/Linux

Dimension Drawing



Ordering Information

- **NDiS S538 (P/N: 10W00S53800X0)**
  SDM-L module, 6th gen. Intel® Core™ LGA1151 type processor, Intel® Q170 chipset

Neu-X100

Fanless Embedded Computer Powered
by Intel® Apollo Lake N3350/N4200 Processor

Main Features

- Intel® Apollo Lake N3350/N4200 processor
- 3.5" MB size as slim chassis design
- Support HDMI2.0 output
- Fanless design
- mini-PCIe slot support Wi-Fi and LTE module

Product Overview

Powered by Intel® Apollo Lake processor, the Neu-X100 fanless embedded player can handle 2 independence display output. The Neu-X100 supports HDMI display, USB 3.0 ports, and a RS232/RS422/RS48 interface, is an ideal embedded player to optimize information visualization, convey brand messages, customer engagement, and smart retail management efficiencies to increase in-store traffic and sales. Also could be applicate as gateway for smart cisy. The slim fanless design with extended durability further covers usages like endless aisles, QSRs, drive-thru kiosks, bus stops, digital transit information signs, and information stands.

Specifications

CPU Support
- Intel® Apollo Lake N3350 processor (2.40GHz,6W)
- Intel® Apollo Lake N4200 processor (2.50GHz,6W)

Graphic
- Intel® HD Graphics 500 (with N3350)
- Intel® HD Graphics 505 (with N4200)

Main Memory
- 1x 204-pin SO-DIMM socket, support up to DDR3L 1866MHz, non-ECC, un-buffered memory up to 8GB

I/O Interface-Front
- 2 x RJ45 with LEDs for Gigabit LAN
- 2 x HDMI 2.0, resolution 4096 x 2160 60Hz
- 1 x COM port (RS232/RS422/RS48)
- 1 x DC-in Jack with lock
- 2 x USB 3.0

I/O Interface-Rear
- 2 x Antenna hole
- 1 x Power button with LED
- 1 x Storage active LED

Internal I/O
- 1 x COM RS232 connector
- 1 x Power connector
- 1 x TPM module connector
- 1 x Line out audio connector

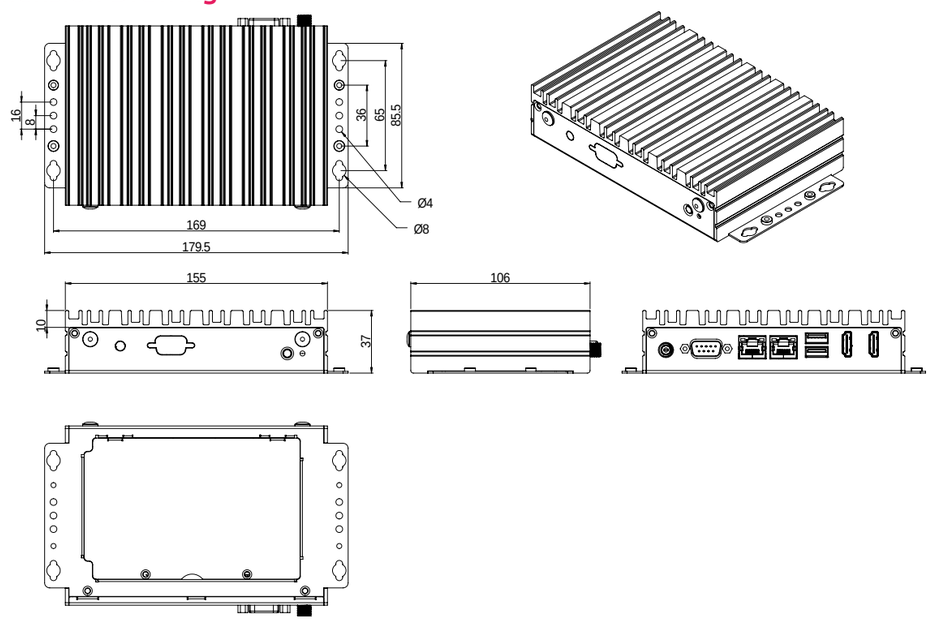
Expansion
- 1 x mini-PCIe full-size connector, support Wi-Fi
- 1 x SIM slot on board (full-size)
- 1 x Internal USB connector
- 1 x LVDS Dual channel connector
- 1 x LCD backlight power in connector

Storage
- 1x M.2 M key 2242 SSD

Power Supply
- 1 x External 45W AC/DC power adapter with lock
- Input: 100VAC to 240VAC
- Output: DC+19VDC

Environment
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 80°C
- Humidity: 95% (non-condensing)

Dimension Drawing



Certification
- CE (EMC EN55032 +EN55024)
- FCC Class A (EMI Part 15B)

Dimensions
- 152mm (L) x 108mm (W) x 375mm (H)

Operating System
- Win10 64-bit

Ordering Information

- **Neu-X100-N3350 (P/N: 10W00X10000X0)**
  Intel® Apollo Lake N3350 processor slim and fanless system
- **Neu-X100-N4200 (P/N: 10W00X10001X0)**
  Intel® Apollo Lake N4200 processor slim and fanless system

KPPC 1514B

15.6" Multi Touch Panel PC
1366x768/400 nits/Intel® 6th Skylake

Main Features

- Intel® 6th Gen. Core™ i LGA1151 35W processors
- (1366 x 768), P-Cap multi-touch display
- Support rich I/O, 2 x GbE LAN, 2 x COM, 5 x USB etc.
- Mounting support: panel/VESA
- Metal housing with robust aluminum IP65 compliant front bezel for harsh environment
- Fanless design

Product Overview

NEXCOM has released the Kiosk Panel PC KPPC 1514B to help build a smart future-proof kiosk that can evolve with changing needs of retail and hospitality industries. Based on Intel® Skylake processor, the KPPC series can power multimedia contents for advertising and enable multiple way of user interaction for self-servicing. The KPPC series is designed with expansion flexibility and ease of use and maintenance and can maximize kiosk uptime and lower total cost of ownership (TCO) for users.

Specifications

Panel
- LCD size: 15.6", 16:9
- Resolution: FHD, 1366 x 768
- Luminance: 400 cd/m
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch
- Ten points P-Cap (projected capacitive touch)
- Light transmission: 86%
- Interface: USB
- Anti-scratch surface: 7H hardness

System
- CPU: Intel® 6th Skylake sockets supported FCLGA1151 35W processors
- Memory: dual DDR4 2133MHz SO-DIMM, up to 32GB, non-ECC, un-buffered
- Graphics: Intel® HD graphics 630
- BIOS: AMI BIOS
- Watchdog Timer 1~255sec./min programmable.
- Expansion: 1 x half mini-PCIe, 1 x PCIe 2.0 (Gen2)

Storage Device
- 1 x 2.5" SATA SSD 6.0Gb/s
- 1 x Full mini-PCIe (mSATA)

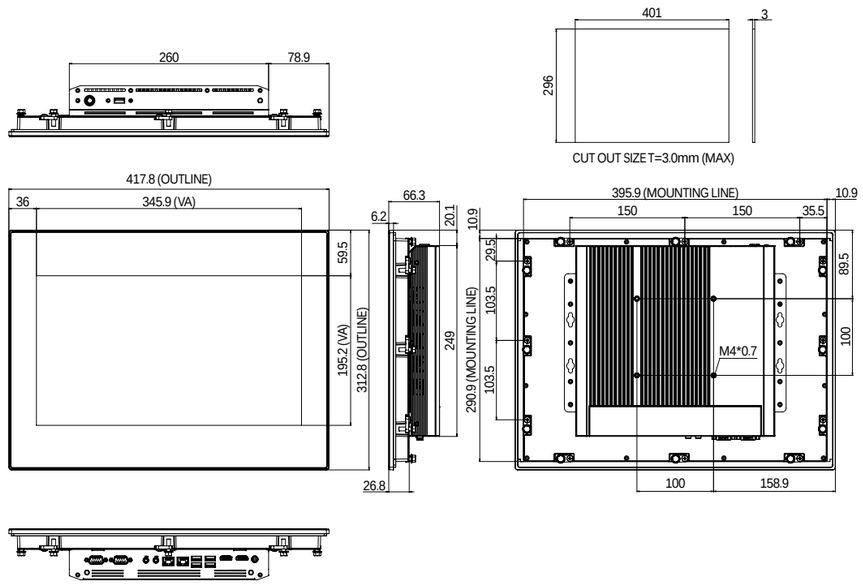
Power Requirements
- Single power 12V DC input

Front I/O
- Power NO/OFF button
- 1 x USB 2.0

Rear I/O
- 2 x GbE LAN Realtek RTL8111G
- 4 x USB 3.0
- 2 x HDMI (HDMI output either one)
- 1 x RS232
- 1 x RS232/422/485
- 1 x Line-out
- 1 x Mic-in
- 1 x 12V DC-in power jack

Mechanical & Environment
- IP protection: IP65 panel front side
- Mounting: panel/wall/VESA 100mm x 100mm
- Operating temperature: 32°F~113°F (0°C~45°C)
- Storage temperature: -4°F~140°F (-20°C~60°C)
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 417.80 x 312.80 x 66.25 (W x H x D) (mm)
- Weight: 7.44kg

Dimension Drawing



OS Support Lists
- Windows 10 IoT 64-bit

Certifications
- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **KPPC 1514B (P/N: 10YK0151400X0)**
  15.6 " LED backlight touch panel PC with Intel® FCLGA1151 35W, w/ 2 x HDMI, 2 x GbE LAN, 4 x USB 3.0, 2 x serial port, 1 x Line-out, 1 x Mic-in
- **12V, 84W power adapter w/ o power cord (P/N: 7400084003X00)**

Options

- **Intel® Pentium® G4400TE (3M Cache, 2.4GHz), 2C/2T, 35W (P/N: 71IX02GTM4X00)**
- **Intel® Pentium® G4600TE (3M Cache, 2.4GHz), 2C/4T, 35W (P/N: TBD)**
- **Intel® Core™ i3-6100TE (4M Cache, 2.70 GHz), 2C/4T, 35W (P/N: 71IX02GTM3X00)**
- **Intel® Core™ i5-6500TE (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IX02GTM1X00)**
- **Intel® Core™ i7-6700TE (8M Cache, up to 3.40 GHz), 4C/8T, 35W (P/N: 71IX02GTM2X00)**
- **Intel® Core™ i3-7101TE (3M Cache, 3.40 GHz), 2C/4T, 35W (P/N: 71IY03GTM3X00)**
- **Intel® Core™ i5-7500T (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IY03GTM2X00)**
- **Intel® Core™ i7-7700T (8M Cache, up to 3.80 GHz), 4C/8T, 35W (P/N: 71IY03GTM1X00)**

KPPC 1521A

15.6” Multi Touch Panel PC
1366x768/400 nits/Intel® Braswell

Main Features

- Intel® Celeron® N 3060 (Braswell) processor
- (1366x768), P-Cap multi-touch display
- Support VGA, DVI-D, 2 x GbE LAN, 5 x COM, 4 x USB 3.0, Line-out/ 1 x Mic-in.etc.
- Mounting support: panel/wall/stand/VESA
- Metal housing with robust aluminum IP65 compliant front bezel for harsh environment
- Fanless design

Product Overview

NEXCOM has released the Kiosk Panel PC KPPC 1521A to help build a smart future-proof kiosk that can evolve with changing needs of retail and hospitality industries. Based on Intel® Braswell processor, the KPPC series can power multimedia contents for advertising and enable multiple way of user interaction for self-servicing. The KPPC series is designed with expansion flexibility and ease of use and maintenance and can maximize kiosk uptime and lower total cost of ownership (TCO) for users.

Specifications

Panel

- LCD size: 15.6”, 16:9
- Resolution: FHD, 1366 x 768
- Luminance: 400cd/m²
- Contrast ratio: 500
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Light transmission: 86%
- Interface: USB
- Anti-scratch surface: 7H hardness

System

- CPU: Intel® Celeron® N3060 dual processor, up to 2.48G, Cache 2 MB L2
- Memory: 1 x DDR3L 1600MHz SO-DIMM, up to 8GB, non-ECC, un-buffered
- Graphics: Intel® HD Graphics 400
- BIOS: AMI BIOS
- Expansion: 1 x mini-PCIe, 1 x M.2 (2280)

Storage Device

- 1 x 2.5” SATA SSD 6.0Gb/s
- 1 x M.2 M-key (2280)

Power Requirements

- Single power 12V DC input
- Power mode AT/ATX (jumper selection)

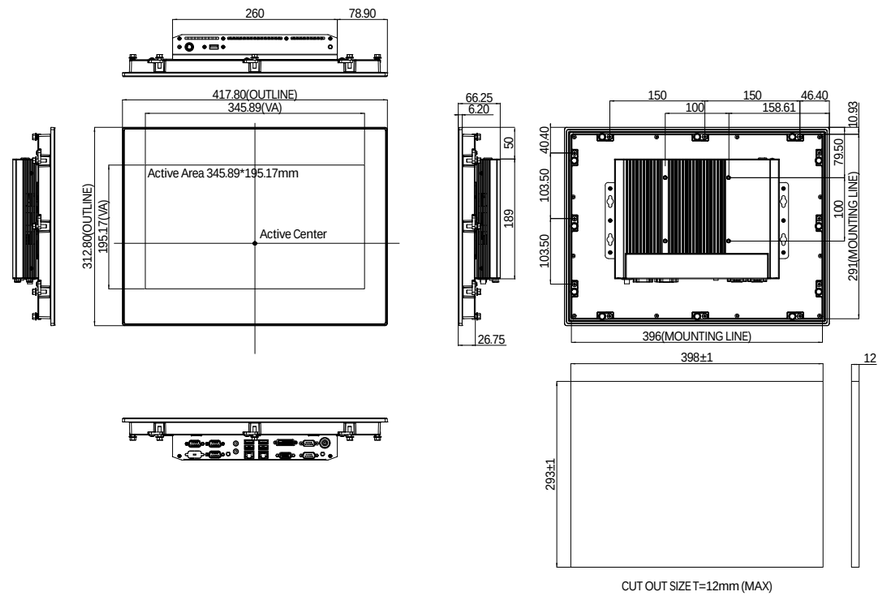
Front I/O

- Power ON/OFF button
- 1 x USB 2.0

Rear I/O

- 2 x GbE LAN Realtek RTL8111G
- 4 x USB 3.0
- 1 x DVI-D
- 1 x VGA
- 4 x RS232
- 1 x RS232/422/485
- 1 x HD AUDIO Line-out/Line-in/Mic-in
- 1 x 12V DC-in lockable power jack

Dimension Drawing



Mechanical & Environment

- IP protection: IP65 panel front side
- Mounting: panel/wall/VESA 100mm x 100mm
- Operating temperature: 32°~122°F (0°C~50°C)
- Storage temperature: -4°F~140°C (-20°C~60°C)
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 417.80 x 318.80 x 66.25 (W x H x D) (mm)
- Weight: 6.2kg

Operating System

- Windows 10 IoT 64-bit
- Windows 8.1 64-bit
- Windows 7 32/64-bit

Certifications

- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **KPPC 1521A (P/N: 10YK0152100X0)**
  15.6” LED backlight touch panel PC with Intel® Celeron® N3060 processor, w/ VGA and DVI-D, 2 x GbE LAN, 4 x USB 3.0, 1 x USB 2.0, 5 x serial port, 1 x Line-out, 1 x Mic-in
- **12V 60W power adapter w/o power cord**
- **2 x SSD bracket (P/N:5061700832X00)**

Options

- **Memory DDR3L 1600MHz**
  4GB (P/N:729BM04G18X00/729BM04G60X00)
  8GB (P/N:729BM08G10X00/729BM08G28X00)
- **2.5” SSD SATA 6.0Gb/s**
  64GB (P/N:73SE064G40X00/73SE064G42X00)
  128GB (P/N: 73SE128G38X00/73SE128G47X00)
  256GB (P/N: 73SE256G14X00/73SE256G22X00)
- **M.2 2280 SSD SATA 6.0Gb/s**
  MLC 64GB (P/N: 73ND064G03X00)
- **12 x Panel Mounting Clips (P/N:88YK0212100X0)**

KPPC 1814B

18.5" Multi Touch Panel PC
1366 x 768/250 nits/Intel® Skylake

Main Features

- Intel® 6th Gen. Core™ i LGA1151 35W processors
- (1366 x 768), P-Cap multi-touch display
- Support rich I/O, 2 x GbE LAN, 2 x COM, 5 x USB etc.
- Mounting support: panel/wall/stand/VESA
- Metal housing with robust aluminum IP65 compliant front bezel for harsh environment
- Fanless design

Product Overview

NEXCOM has released the Kiosk Panel PC KPPC 1814B to help build a smart future-proof kiosk that can evolve with changing needs of retail and hospitality industries. Based on Intel® Skylake processor, the KPPC series can power multimedia contents for advertising and enable multiple way of user interaction for self-servicing. The KPPC series is designed with expansion flexibility and ease of use and maintenance and can maximize kiosk uptime and lower total cost of ownership (TCO) for users.

Specifications

Panel
- LCD size: 18.5", 16:9
- Resolution: 1366 x 768
- Luminance: 250 cd/m
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80 (U), 80 (D), 85 (L), 85 (R)
- Backlight: LED

Touch
- Ten points P-Cap (projected capacitive touch)
- Light transmission: 86%
- Interface: USB
- Anti-scratch surface: 7H hardness

System
- CPU: Intel® 6th Skylake sockets supported FCLGA1151 35W processors
- Memory: dual DDR4 2133MHz SO-DIMM, up to 32GB, non-ECC, un-buffered
- Graphics: Intel® HD Graphics 630
- BIOS: AMI BIOS
- Watchdog Timer 1~255sec./min programmable.
- Expansion: 1 x half mini-PCIe, 1 x PCIe 2.0 (Gen2)

Storage Device
- 1 x 2.5" SATA SSD 6.0Gb/s
- 1 x Full mini-PCIe (mSATA)

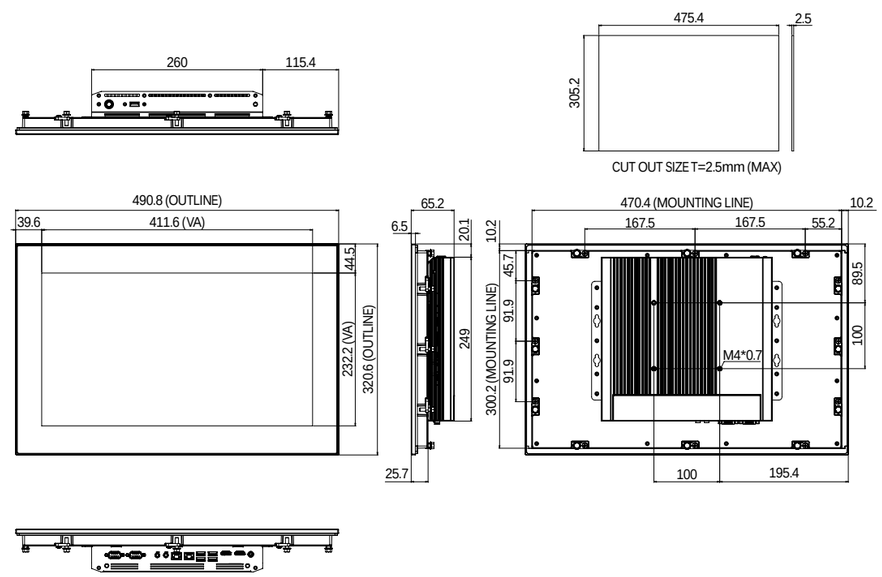
Power Requirements
- Single power 12V DC input

Front I/O
- Power ON/OFF button
- 1 x USB 2.0

Rear I/O
- 2 x GbE LAN Realtek RTL8111G
- 4 x USB 3.0
- 2 x HDMI (HDMI output either one)
- 1 x RS232
- 1 x RS232/422/485
- 1 x Line-out
- 1 x Mic-in
- 1 x 12V DC-in power jack

Mechanical & Environment
- IP protection: IP65 panel front side
- Mounting: panel/wall/VESA 100mm x 100mm
- Operating temperature: 32°F~113°F (0°C~45°C)
- Storage temperature: -4°F~140°F (-20°C~60°C)
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 490.80 x 320.60 x 65.15 (W x H x D) (mm)
- Weight: 8.0kg

Dimension Drawing



OS Support Lists
- Windows 10 IoT 64-bit

Certifications
- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **KPPC 1814B (P/N: 10YK0181400X0)**
  18.5 " LED backlight touch panel PC with Intel® FCLGA1151 35W, w/ 2 x HDMI, 2 x GbE LAN, 4 x USB 3.0, 2 x serial port, 1 x Line-out, 1 x Mic-in
- **12V, 84W power adapter w/ o power cord (P/N: 7400084003X00)**

Options

- **Intel® Pentium® G4400TE (3M Cache, 2.4GHz), 2C/2T, 35W (P/N: 71IX02GTM4X00)**
- **Intel® Pentium® G4600TE (3M Cache, 2.4GHz), 2C/4T, 35W (P/N: TBD)**
- **Intel® Core™ i3-6100TE (4M Cache, 2.70 GHz), 2C/4T, 35W (P/N: 71IX02GTM3X00)**
- **Intel® Core™ i5-6500TE (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IX02GTM1X00)**
- **Intel® Core™ i7-6700TE (8M Cache, up to 3.40 GHz), 4C/8T, 35W (P/N: 71IX02GTM2X00)**
- **Intel® Core™ i3-7101TE (3M Cache, 3.40 GHz), 2C/4T, 35W (P/N: 71IY03GTM3X00)**
- **Intel® Core™ i5-7500T (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IY03GTM2X00)**
- **Intel® Core™ i7-7700T (8M Cache, up to 3.80 GHz), 4C/8T, 35W (P/N: 71IY03GTM1X00)**

KPPC 1821A

18.5" Multi Touch Panel PC

1366 x 768/250 nits/Intel® Celeron® N 3060 (Braswell) processor

Main Features

- Intel® Celeron® N 3060 (Braswell) processor
- (1366x768), P-Cap multi-touch display
- Support VGA, DVI-D, 2 x GbE LAN, 5 x COM , 4 x USB 3.0, Line-out/ 2 x Mic-in.etc.
- Mounting support: panel/wall/stand/VESA
- Metal housing with robust aluminum IP65 compliant front side bezel for harsh environment
- Fanless design

Product Overview

NEXCOM has released the Kiosk Panel PC KPPC 1821A to help build a smart future-proof kiosk that can evolve with changing needs of retail and hospitality industries. Based on Intel® Braswell processor, the KPPC series can power multimedia contents for advertising and enable multiple way of user interaction for self-servicing. The KPPC series is designed with expansion flexibility and ease of use and maintenance and can maximize kiosk uptime and lower total cost of ownership (TCO) for users.

Specifications

Panel

- LCD size: 18.5", 16:9
- Resolution: 1366 x 768
- Luminance: 250cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Light transmission: 86%
- Interface: USB
- Anti-scratch surface: 7H hardness

System Memory

- CPU: Intel® Celeron® N3060 dual processor, up to 2.48G, Cache 2 MB L2
- Memory: 1 x DDR3L 1600MHz SO-DIMM, up to 8GB, non-ECC, un-buffered
- Graphics: Intel® HD Graphics 400
- BIOS: AMI BIOS
- Expansion: 1 x mini-PCIe, 1 x M.2 (2280)

Storage Device

- 1 x 2.5" SATA SSD 6.0Gb/s
- 1 x M.2 M-key (2280)

Power Requirements

- Single power 12V DC input

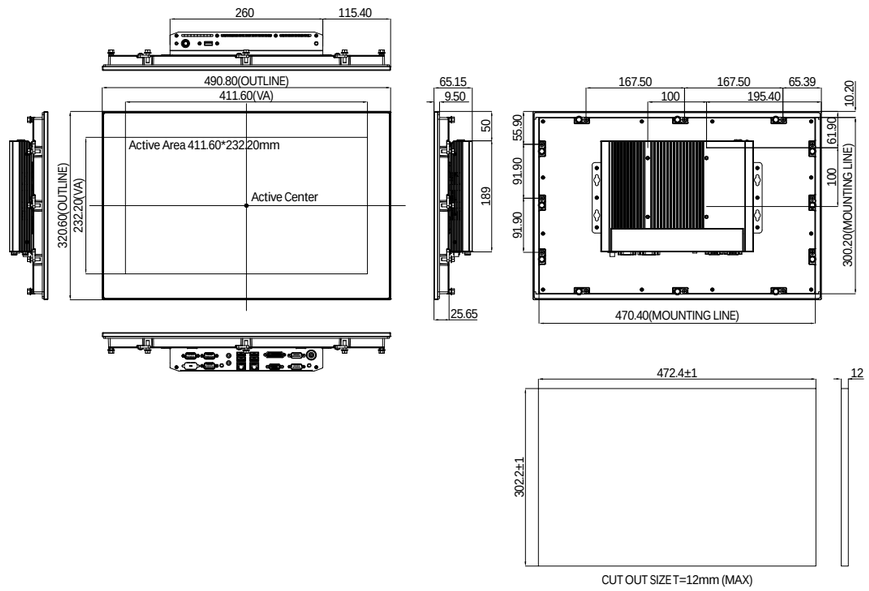
Front I/O

- Power ON/OFF button
- 1 x USB 2.0

Rear I/O

- 2 x GbE LAN Realtek RTL8111G
- 4 x USB 3.0
- 1 x DVI-D
- 1 x VGA
- 4 x RS232
- 1 x RS232/422/485
- 1 x HD AUDIO Line-out/Line-in/Mic-in
- 1 x 12V DC-in lockable power jack

Dimension Drawing



Mechanical & Environment

- IP protection: IP65 panel front side
- Mounting: panel/wall/VESA 100mm x 100mm
- Operating temperature: 32°~122°F (0°C~50°C)
- Storage temperature: -4°F~140°C (-20°C~60°C)
- Operating humidity: 10%~90% relativehumidity, non-condensing
- Dimension: 490.80 x 320.60 x 65.15 (W x H x D) (mm)
- Weight: 6.8kg

Operating System

- Windows 10 IoT 64-bit
- Windows 8.1 64-bit
- Windows 7 32/64-bit

Certificate

- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **KPPC 1821A (P/N:10YK0182100X0)**
  18.6" LED backlight touch panel PC with Intel® Celeron® N3060 processor, w/ VGA and DVI-D, 2 x GbE LAN, 4 x USB 3.0, 1 x USB 2.0, 5 x serial port, 1 x Line-out, 1 x Mic-in
- **12V 60W power adapter w/o power cord**
- **2 x SSD bracket (P/N:5061700832X00)**

Options

- **Memory DDR3L 1600MHz**
  4GB (P/N:729BM04G18X00/729BM04G60X00)
  8GB (P/N:729BM08G10X00/729BM08G28X00)
- **2.5" SSD SATA 6.0Gb/s**
  64GB (P/N:73SE064G40X00/73SE064G42X00)
  128GB (P/N: 73SE128G38X00/73SE128G47X00)
  256GB (P/N: 73SE256G14X00/73SE256G22X00)
- **M.2 2280 SSD SATA 6.0Gb/s**
  MLC 64GB (P/N: 73ND064G03X00)
- **12 x Panel mounting clips (P/N:88YK0212100X0)**

KPPC 2114B

21.5" Multi Touch Panel PC
1920x1080/250 nits/Intel® Skylake

Main Features

- Intel® 6th Gen. Core™ i LGA1151 35W processors
- FHD (1920 x 1080), P-Cap multi-touch display
- Support rich I/O, 2 x GbE LAN, 2 x COM, 5 x USB etc.
- Mounting support: panel/wall/stand/VESA
- Metal housing with robust aluminum IP65 compliant front bezel for harsh environment
- Fanless design

Product Overview

NEXCOM has released the Kiosk Panel PC KPPC 2114B to help build a smart future-proof kiosk that can evolve with changing needs of retail and hospitality industries. Based on Intel® Skylake processor, the KPPC series can power multimedia contents for advertising and enable multiple way of user interaction for self-servicing. The KPPC series is designed with expansion flexibility and ease of use and maintenance and can maximize kiosk uptime and lower total cost of ownership (TCO) for users.

Specifications

Panel

- LCD size: 21.5", 16:9
- Resolution: FHD, 1920 x 1080
- Luminance: 250 cd/m
- Contrast ratio: 3000
- LCD color: 16.7M
- Viewing angle: 89 (U), 89 (D), 89 (L), 89 (R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Light transmission: 86%
- Interface: USB
- Anti-scratch surface: 7H hardness

System

- CPU: Intel® 6th Skylake Sockets supported FCLGA1151 35W processors
- Memory: Dual DDR4 2133MHz SO-DIMM, up to 32GB, non-ECC, un-buffered
- Graphics: Intel® HD Graphics 630
- BIOS: AMI BIOS
- Watchdog Timer 1~255sec./min programmable.
- Expansion: 1 x half mini-PCIe, 1 x PCIe 2.0 (Gen2)

Storage Device

- 1 x 2.5" SATA SSD 6.0Gb/s
- 1 x Full mini-PCIe (mSATA)

Power Requirements

- Single power 12V DC input
- Power mode AT/ATX (jumper selection)

Front I/O

- Power ON/OFF button
- 1 x USB 2.0

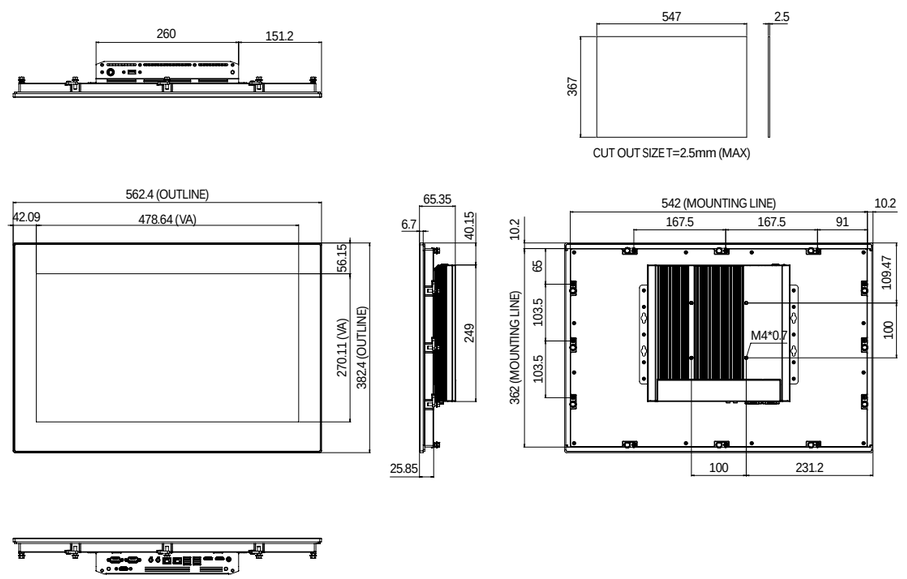
Rear I/O

- 2 x GbE LAN Realtek RTL8111G
- 4 x USB 3.0
- 2 x HDMI (HDMI output either one)
- 1 x RS232
- 1 x RS232/422/485
- 1 x Line-out
- 1 x Mic-in
- 1 x 12V DC-in power jack

Mechanical & Environment

- IP protection: IP65 panel front side
- Mounting: panel/wall/VESA 100mm x 100mm
- Operating temperature: 32°F~113°F (0°C~45°C)
- Storage temperature: -4°F~140°F (-20°C~60°C)
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 562.40 x 382.40 x 65.35 (W x H x D) (mm)
- Weight: 9.9kg

Dimension Drawing



OS Support Lists

- Windows 10 IoT 64-bit

Certifications

- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **KPPC 2114B (P/N: 10YK0211400X0)**
  21.5 " LED backlight touch panel PC with Intel® CPU FCLGA1151 35W, w/ 2 x HDMI, 2 x GbE LAN, 4 x USB 3.0, 2 x serial port, 1 x Line-out, 1 x Mic-in
- **12V, 84W power adapter w/o power cord (P/N: 7400084003X00)**

Options

- **Intel® Pentium® G4400TE (3M Cache, 2.4GHz), 2C/2T, 35W (P/N: 71IX02GTM4X00)**
- **Intel® Pentium® G4600TE (3M Cache, 2.4GHz), 2C/4T, 35W (P/N: TBD)**
- **Intel® Core™ i3-6100TE (4M Cache, 2.70 GHz), 2C/4T, 35W (P/N: 71IX02GTM3X00)**
- **Intel® Core™ i5-6500TE (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IX02GTM1X00)**
- **Intel® Core™ i7-6700TE (8M Cache, up to 3.40 GHz), 4C/8T, 35W (P/N: 71IX02GTM2X00)**
- **Intel® Core™ i3-7101TE (3M Cache, 3.40 GHz), 2C/4T, 35W (P/N: 71IY03GTM3X00)**
- **Intel® Core™ i5-7500T (6M Cache, up to 3.30 GHz), 4C/4T, 35W (P/N: 71IY03GTM2X00)**
- **Intel® Core™ i7-7700T (8M Cache, up to 3.80 GHz), 4C/8T, 35W (P/N: 71IY03GTM1X00)**

KPPC 2121A

21.5” Multi Touch Panel PC

1920 x 1080/250 nits/Intel® Celeron® N 3060 (Braswell) processor

Main Features

- Intel® Celeron® N 3060 (Braswell) processor
- FHD (1920 x 1080), P-Cap multi-touch display
- Support VGA, DVI-D, 2 x GbE LAN, 5 x COM, 4 x USB 3.0, Line-out/ Mic-in.etc.
- Mounting support: panel/wall/stand/VESA
- Metal housing with robust aluminum IP65 compliant front side bezel for harsh environment
- Fanless design

Product Overview

NEXCOM has released the Kiosk Panel PC KPPC 2121A to help build a smart future-proof kiosk that can evolve with changing needs of retail and hospitality industries. Based on Intel® Braswell processor, the KPPC series can power multimedia contents for advertising and enable multiple way of user interaction for self-servicing. The KPPC series is designed with expansion flexibility and ease of use and maintenance and can maximize kiosk uptime and lower total cost of ownership (TCO) for users.

Specifications

Panel

- LCD size: 21.5”, 16:9
- Resolution: FHD, 1920 x 1080
- Luminance: 250cd/m²
- Contrast ratio: 3000
- LCD color: 16.7M
- Viewing angle: 89(U), 89(D), 89(L), 89(R)
- Backlight: LED

Touch

- Ten points P-Cap (projected capacitive touch)
- Light transmission: 86%
- Interface: USB
- Anti-scratch surface: 7H hardness

System

- CPU: Intel® Celeron® N3060 dual processor, up to 2.48G, Cache 2 MB L2
- Memory: 1 x DDR3L 1600MHz SO-DIMM, up to 8GB, non-ECC, un-buffered
- Graphics: Intel® HD Graphics 400
- BIOS: AMI BIOS
- Expansion: 1 x mini-PCIe, 1 x M.2 (2280)

Storage Device

- 1 x 2.5” SATA SSD 6.0Gb/s
- 1 x M.2 M-key (2280)

Power Requirements

- Single power 12V DC input

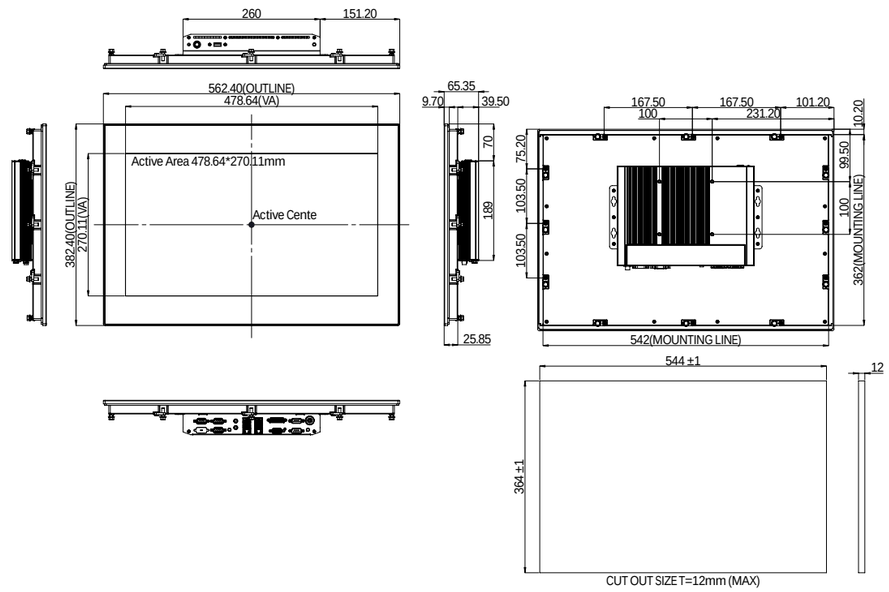
Front I/O

- Power ON/OFF button
- 1 x USB 2.0

Rear I/O

- 2 x GbE LAN Realtek RTL8111G
- 4 x USB 3.0
- 1 x DVI-D
- 1 x VGA
- 4 x RS232
- 1 x RS232/422/485
- 1 x HD AUDIO Line-out/Line-in/Mic-in
- 1 x 12V DC-in lockable power jack

Dimension Drawing



Mechanical & Environment

- IP protection: IP65 panel front side
- Mounting: panel/wall/VESA 100mm x 100mm
- Operating temperature: 32° ~122°F (0°C ~50°C)
- Storage temperature: -4°F ~140°C (-20°C~60°C)
- Operating humidity: 10%~90% relativehumidity, non-condensing
- Dimension: 562.40 x 382.40 x 65.35 (W x H x D) (mm)
- Weight: 8.7kg

Operating System

- Windows 10 IoT 64-bit
- Windows 8.1 64-bit
- Windows 7 32/64-bit

Certificate

- EMC & Safety
- CE/FCC Class A

Ordering Information

Barebone

- **KPPC 2121A (P/N:10YK0212102X0)**
  21.5” LED backlight touch panel PC with Intel® Celeron® N3060 processor, w/ VGA and DVI-D, 2 x GbE LAN, 4 x USB 3.0, 1 x USB 2.0, 5 x serial port, 1 x Line-out, 1 x Mic-in
- **12V 60W power adapter w/o power cord**
- **2 x SSD bracket (P/N:5061700832X00)**

Options

- **Memory DDR3L 1600MHz**
  4GB (P/N:729BM04G18X00/729BM04G60X00)
  8GB (P/N:729BM08G10X00/729BM08G28X00)
- **2.5” SSD SATA 6.0Gb/s**
  64GB (P/N:73SE064G40X00/73SE064G42X00)
  128GB (P/N: 73SE128G38X00/73SE128G47X00)
  256GB (P/N: 73SE256G14X00/73SE256G22X00)
- **M.2 2280 SSD SATA 6.0Gb/s, MLC 64GB (P/N: 73ND064G03X00)**
- **12 x Panel mounting clips (P/N:88YK0212100X0)**

OPPC 1240T

12.1” TFT SVGA 4:3 Fanless Open Frame PC with Intel Atom® E3826, 1.46GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM and VGA

Main Features

- 4:3 12.1” SVGA fanless LED panel computer
- Intel Atom® E3826, dual core, low power consumption CPU
- PS2 KB/ MS/Line-out/dual GbE/3 x USB
- 2 x RS232/422/485, 2nd display-VGA, 2 x mini-PCIe sockets, 1 x CFast
- Remote power switch
- DDR3L 4GB/2.5” HDD bracket
- Support JMobile HMI and CODESYS SoftLogic (optional)
- Mounting support: panel/wall stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

Incorporated a 12.1” 4:3 touch screen LCD panel with resolutions up to 1024 x 768 (XGA) and 350 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation. The OPPC 1240T are fanless panel PC based on the Atom® E3826 processor. The OPPC 1240T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder.

With support for wide power input of 12V~30V, OPPC 1240T can gain a strong foothold in industrial field and machine devices. In addition, OPPC 1240T can hook 2nd display via a VGA port for dual independent display. OPPC 1540T has two isolated RS232/422/485 ports.

Specifications

Panel

- LED Size: 12.1", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 350 cd/m²
- Contrast ratio: 800
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 80(L), 80(R)
- Backlight: LED

Touch

- 5-wire resistive
- Light transmission: 80%
- Interface: USB

System

- CPU: On-board dual core Intel Atom® processor E3826 1.46GHz, 1M L2 Cache
- Processor: Intel® Celeron® J1900 processor, 4C, 2.0GHz, 2MB Cache (optional)
- BIOS: AMI BIOS
- System memory: 22 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/ 1333, non-ECC and un-buffered
- Storage device:
  - 1 x external locked CFast socket
  - 1 x hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25℃)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module)

Rear I/O

- PS2 keyboard/mouse
- Audio port: 1x Line-out
- Remote power switch
- Ethernet: 2x RJ45
- USB: 2 x USB 2.0; 1 x USB 3.0
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Reset button
- 2nd display VGA port: 1 x DB15
- Power switch

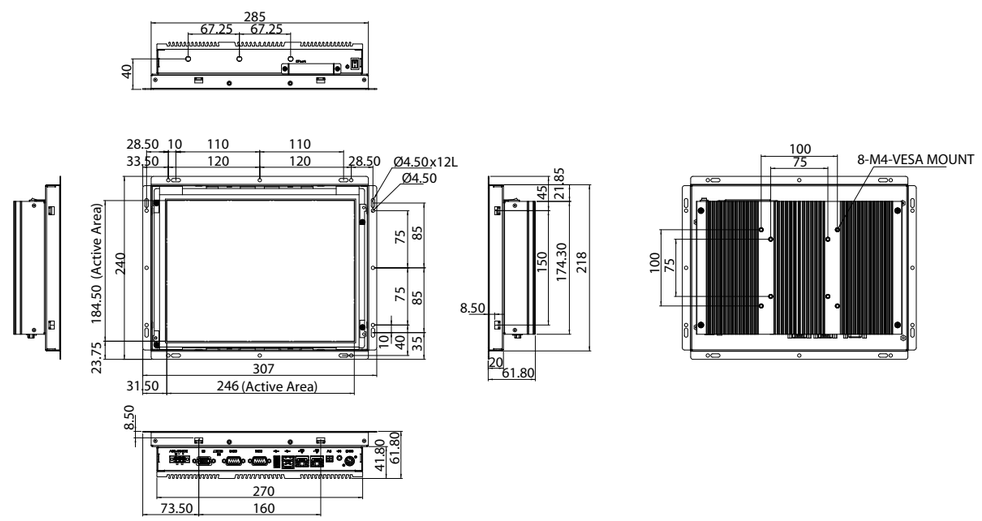
Audio

- AC’97 codec: realtek ALC886-GR
- Audio interface: Line-out/Line-in (optional)/MIC-in (optional) audio Jack

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 based-Tx Ethernet compatible

Dimension Drawing



Mechanical & Environment

- Mounting:
  Panel/wall/stand/VESA 100mm x 100mm
  Power input: 12~30VDC
  Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  1Grms @ sine, 5~500Hz, 1hr/axis (HDD Operating)
  2Grms @ random condition, 5~500Hz, 0.5hr/axis (Non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 307 x 240 x 61.8mm
- Weight: 3.8 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **OPPC1240T (P/N: 90IQ1240T00X0)**
  12” TFT XGA 4:3 fanless open frame PC with Intel Atom® E3826 1.46 GHz, touch screen, 4GB DDR3L, 3 x USB, 2 x COM and VGA

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

OPPC 1540T

15” TFT XGA 4:3 Fanless Open Frame PC with Intel Atom® E3826, 1.46GHz, Touch Screen, 2GB DDR3L, 3 x USB, 2 x COM and VGA

Main Features

- 4:3 15" XGA fanless panel computer
- Intel Atom® E3826, dual core, low power consumption CPU
- PS2 KB/MS/Line-out/dual GbE/3 x USB
- 2 x RS232/422/485, 2nd display-VGA, 2 x mini-PCIe sockets, 1 x CFast
- Remote power switch
- DDR3L 2GB/2.5" HDD bracket
- Support JMobile HMI and CODESYS SoftLogic (optional)
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

Incorporated a 15" 4:3 touch screen LCD panel with resolutions up to 1024 x 768 (XGA) and 420 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation. The OPPC1540T are fanless panel PC based on the Atom® E3826 processor. The OPPC 1540T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder.

With support for wide power input of 12~30VDC, OPPC 1540T can gain a strong foothold in industrial field and machine devices. In addition, OPPC 1540T can hook 2nd display via a VGA port for dual independent display. OPPC 1540T has two isolated RS232/422/485 ports.

Specifications

Panel

- LED size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 420 cd/m²
- Contrast ratio: 800
- LCD color: 262K
- Viewing angle: 80(U), 80(D), 80(L), 80(R)
- Backlight: LED

Touch

- 5-wire resistive
- Touch light transmission: 81%
- Touch interface: USB

System

- CPU: On-board Intel Atom® dual core processor E3826, 1.46GHz, 1M L2 Cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 2GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- PS2 keyboard/mouse
- Audio port: 1 x Line-out
- Remote power switch
- Ethernet: 2 x RJ45
- USB: 2 x USB 2.0; 1 x USB 3.0
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Reset button
- 2nd display VGA port: 1 x DB15
- Power switch

Audio

- HD Codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in (optional)/Mic-in (optional) audio Jack

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment

- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 329 x 280 x 69.3mm
- Weight: 4 kg

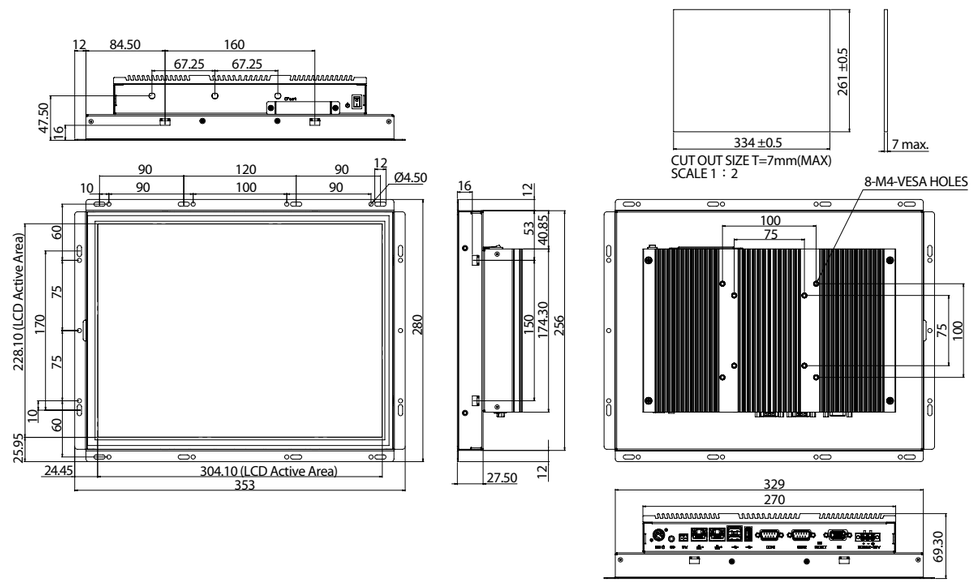
Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Dimension Drawing



Ordering Information

Barebone

- **OPPC 1540T (P/N: 90IQ1540T00X0)**
  15" XGA LED backlight touch panel PC with Intel Atom® E3826 1.46 GHz, touch screen, 2GB DDR3L with 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060017X00)**

OPPC 1540HT-J1900

15" TFT XGA 4:3 Fanless Open Frame PC with
Intel® Celeron® J1900, 2.0GHz, 1000 nits

Main Features

- 4:3 15" XGA fanless panel computer
- Intel® Celeron® J1900, quad core, low power consumption CPU
- 1000 nits high brightness
- PS2 KB/MS/Line-out/dual GbE/3 x USB
- 2 x RS232/422/485, 2nd display-VGA, 2 x mini-PCIe sockets, 1 x CFast
- Remote power switch
- DDR3L 4GB/2.5" HDD bracket
- Support JMobile HMI and CODESYS SoftLogic (optional)
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

Incorporated a 15" 4:3 touch screen LCD panel with resolutions up to 1024 x 768 (XGA) and 1000 nits high brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation. The OPPC 1540HT-J1900 are fanless panel PC based on the Celeron® J1900 processor. The OPPC 1540HT-J1900 supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder.

With support for wide power input of 12~30VDC, OPPC 1540HT-J1900 can gain a strong foothold in industrial field and machine devices. In addition, OPPC 1540HT-J1900 can hook 2nd display via a VGA port for dual independent display. OPPC 1540HT-J1900 has two isolated RS232/422/485 ports.

Specifications

Panel

- LED size: 15", 4:3
- Resolution: XGA 1024 x 768
- Luminance: 1000 cd/m²
- Contrast ratio: 2500
- LCD color: 16.2M
- Viewing angle: 88(U), 88(D), 88(L), 88(R)
- Backlight: LED

Touch

- 5-wire resistive
- Touch light transmission: 81%
- Touch interface: USB

System

- CPU: On-board Intel® Celeron®, quad core processor J1900, 2.0GHz, 2M L2 Cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- PS2 keyboard/mouse
- Audio port: 1 x Line-out
- Remote power switch
- Ethernet: 2 x RJ45
- USB: 2 x USB 2.0; 1 x USB 3.0
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Reset button
- 2nd display VGA port: 1 x DB15
- Power switch

Audio

- HD Codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in (optional)/Mic-in (optional) audio Jack

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

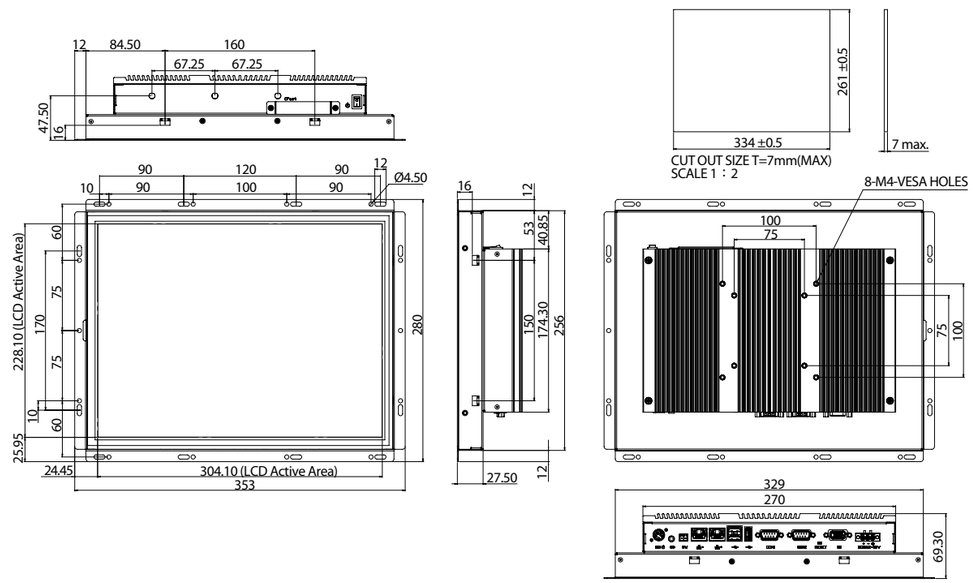
Mechanical & Environment

- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 329 x 280 x 69.3mm
- Weight: 4 kg

Certifications

- CE approval
- FCC Class A

Dimension Drawing



OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **OPPC 1540HT-J1900 (P/N: 90IQ1540H00X0)**
  15" XGA LED backlight touch pael PC with Intel® Celeron® J1900, 2.0GHz, 1000 nits, touch screen, 4GB DDR3L with 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

OPPC 1740T

17” TFT SXGA 4:3 Fanless Open Frame PC with Intel Atom® E3826, 1.46GHz, Touch Screen, 4GB DDR3L, 3 x USB, 2 x COM and VGA

Main Features

- 4:3 17" SXGA fanless LED panel computer
- Intel Atom® E3826, dual core, low power consumption CPU
- PS2 KB/MS/Line-out/dual GbE/3 x USB
- 2 x RS232/422/485, 2nd display-VGA, 2 x mini-PCIe sockets, 1 x CFast
- Remote power switch
- DDR3L 4GB/ 2.5” HDD bracket
- Support JMobile HMI and CODESYS SoftLogic (optional)
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

Incorporated a 17" 4:3 touch screen LCD panel with resolutions up to 1024 x 768 (XGA) and 420 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation. The OPPC 1740T are fanless panel PC based on the Atom® E3826 processor. The OPPC 1740T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder.

With support for wide power input of 12V~30V, OPPC 1740T can gain a strong foothold in industrial field and machine devices. In addition, OPPC 1740T can hook 2nd display via a VGA port for dual independent display. OPPC 1540T has two isolated RS232/422/485 ports.

Specifications

Panel

- LED Size: 17", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350 cd/m²
- Contrast ratio: 1000
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch

- 5-wire resistive
- Light transmission: 80%
- Interface: USB

System

- CPU: On-board dual core Intel Atom® processor E3826 1.46GHz, 1M L2 Cache
- Processor: Intel® Celeron® J1900 processor, 4C, 2.0GHz, 2MB Cache (optional)
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB DDR3L-1066/1333, non-ECC and un-buffered
- Storage Device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi or 3.5G module)

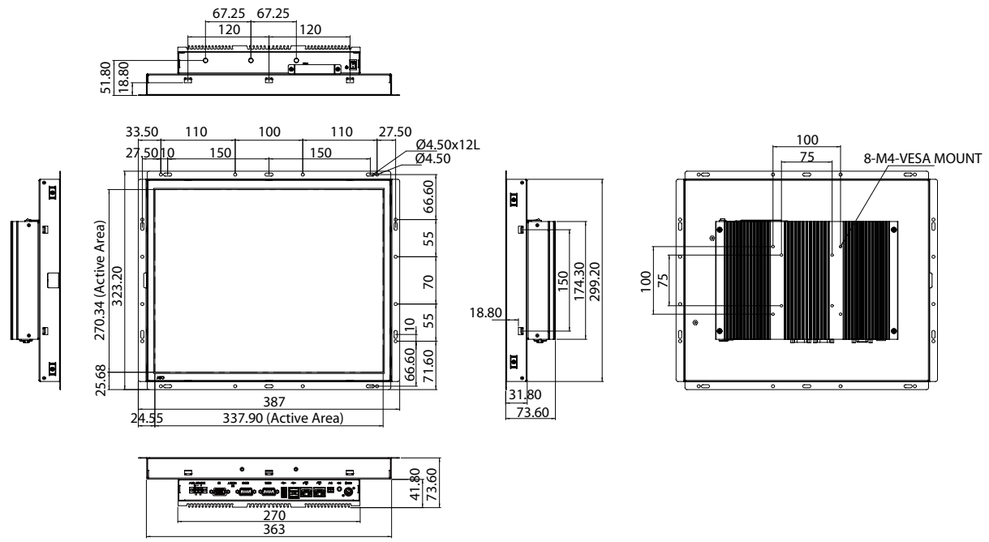
Rear I/O

- PS2 keyboard/mouse
- Audio port: 1x Line-out
- Remote power switch
- Ethernet: 2x RJ45
- USB: 2 x USB 2.0; 1 x USB 3.0
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Reset button
- 2nd display VGA port: 1 x DB15
- Power switch

Audio

- AC’97 codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in (optional)/Mic-in (optional) audio Jack

Dimension Drawing



Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment

- Mounting: panel/wall/stand/VESA 100mm x 100mm
  Power input: 12~30VDC
  Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  IEC 68 2-64 (w/ HDD)
  1Grms @ sine, 5~500Hz, 1hr/axis (HDD Operating)
  2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  IEC 68 2-27
  HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 387 x 323.2 x 73.6mm
- Weight: 5.6 kg

Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

- **OPPC 1740T (P/N: 90IQ1740T00X0)**
  17” XGA LED backlight touch panel PC with Intel Atom® E3826 1.46 GHz, touch screen, 4GB DDR3L with 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

OPPC 1940T

19” TFT SXGA 4:3 Fanless Open Frame PC with Intel Atom® E3826, 1.46GHz, Touch Screen, 2GB DDR3L, 3 x USB, 2 x COM and VGA

Main Features

- 4:3 19" SXGA faness panel computer
- Intel Atom® E3826, dual core, low power consumption CPU
- PS2 KB/MS/Line-out/dual GbE/3 x USB
- 2 x RS232/422/485, 2nd display-VGA, 2 x mini-PCIe sockets, 1 x CFast
- Remote power switch
- DDR3L 2GB/2.5" HDD bracket
- Support JMobile HMI and CODESYS SoftLogic (optional)
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

Incorporated a 19" 4:3 touch screen LCD panel with resolutions up to 1280 x 1024 (SXGA) and 350 nits brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation. The OPPC1940T are fanless panel PC based on the Atom® E3826 processor. The OPPC 1940T supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder.

With support for wide power input of 12~30VDC, OPPC 1940T can gain a strong foothold in industrial field and machine devices. In addition, OPPC 1940T can hook 2nd display via a VGA port for dual independent display. OPPC 1940T has two isolated RS232/422/485 ports.

Specifications

Panel

- LED size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 350 cd/m²
- Contrast ratio: 1000:1
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch

- 5-wire resistive
- Touch light transmission: 80%
- Touch interface: USB

System

- CPU: On-board Intel Atom® dual core processor E3826, 1.46GHz, 1M L2 Cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 2GB DDR3L (default), support up to 8GB (4GB+4GB) DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
- H/W status monitor: monitoring system temperature, and voltage
- Expansion: 2 x mini-PCIe sockets (support optional Wi-Fi, 3.5G module)

Rear I/O

- PS2 keyboard/mouse
- Audio port: 1 x Line-out
- Remote power switch
- Ethernet: 2 x RJ45
- USB: 2 x USB 2.0; 1 x USB 3.0
- COM #1: RS232/422/485
- COM #2: RS232/422/485
- Reset button
- 2nd display VGA port: 1 x DB15
- Power switch

Audio

- HD Codec: Realtek ALC886-GR
- Audio interface: Line-out/Line-in (optional)/Mic-in (optional) audio Jack

Ethernet

- LAN chip: dual Intel® I210-AT Gigabit LAN
- Ethernet interface: 10/100/1000 Based-Tx Ethernet compatible

Mechanical & Environment

- Mounting: panel/wall/stand/VESA 100mm x 100mm
- Power input: 12~30VDC
- Power adapter: optional AC to DC power adapter (+12V, 60W)
- Vibration:
  - IEC 68 2-64 (w/ HDD)
  - 1Grms @ sine, 5~500Hz, 1hr/axis (HDD operating)
  - 2Grms @ sine, 5~500Hz, 1hr/axis (CFast operating)
  - 2.2Grms @ random condition, 5~500Hz, 0.5hr/axis (non-operating)
- Shock:
  - IEC 68 2-27
  - HDD: 20G@wall mount, half sine, 11ms
- Operating temperature: -5°C to 50°C
- Storage temperature: -20°C to 75°C
- Operating humidity: 10%~90% relative humidity, non-condensing
- Dimension: 422.6(W) x 350.6(H) x 73.2(D)mm
- Weight: 6.15 kg

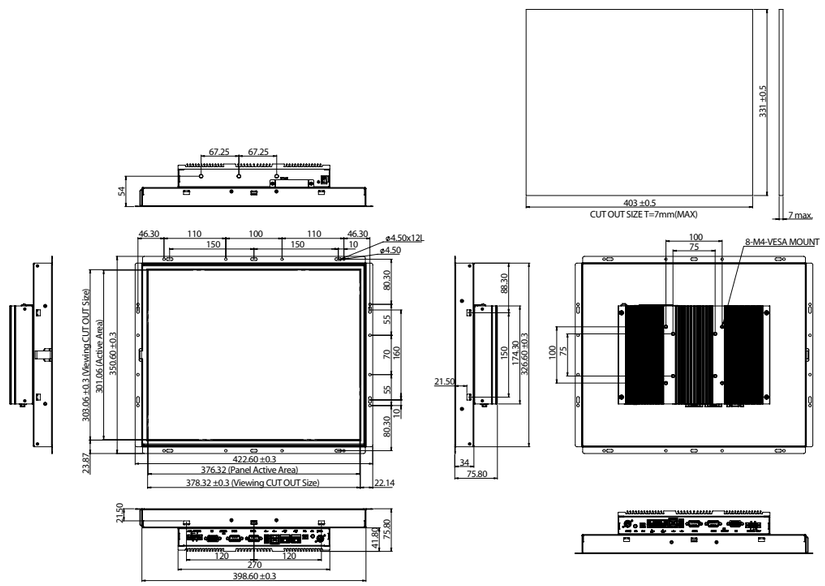
Certifications

- CE approval
- FCC Class A

OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Dimension Drawing



Ordering Information

Barebone

- **OPPC 1940T (P/N: 90IQ1940T00X0)**
  19" SXGA LED backlight touch panel PC with Intel Atom® E3826 1.46 GHz, touch screen, 2GB DDR3L with 2 x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060017X00)**

OPPC 1940HT-J1900

19” TFT SXGA 4:3 Fanless Open Frame PC with
Intel® Celeron® J1900, 2.0GHz, 1000 nits

Main Features

- 4:3 19" SXGA fanless panel computer
- Intel® Celeron® J1900, quad core, low power consumption CPU
- 1000 nits high brightness
- PS2 KB/MS/Line-out/dual GbE/3 x USB
- 2 x RS232/422/485, 2nd display-VGA, 2 x mini-PCIe sockets, 1 x CFast
- Remote power switch
- DDR3L 4GB/2.5" HDD bracket
- Support JMobile HMI and CODESYS SoftLogic (optional)
- Mounting support: panel/wall/stand/VESA 100mm x 100mm
- Wide range power input 12~30VDC

Product Overview

Incorporated a 19" 4:3 touch screen LCD panel with resolutions up to 1280 x 1024 (SXGA) and 1000 nits high brightness. It is specially designed with bezel-less display which allows customers to design front bezel according to their application requirements without any limitation. The OPPC 1940HT-J1900 are fanless panel PC based on the Celeron® J1900 processor. The OPPC 1940HT-J1900 supports WWAN/WLAN expansion and others via dual Gigabit Ethernet connectors, two mini-PCIe slots and one SIM card holder.

With support for wide power input of 12~30VDC, OPPC 1940HT-J1900 can gain a strong foothold in industrial field and machine devices. In addition, OPPC 1940HT-J1900 can hook 2nd display via a VGA port for dual independent display. OPPC 1940HT-J1900 has two isolated RS232/422/485 ports.

Specifications

Panel

- LED size: 19", 4:3
- Resolution: SXGA 1280 x 1024
- Luminance: 1000 cd/m²
- Contrast ratio: 1000:1
- LCD color: 16.7M
- Viewing angle: 80(U), 80(D), 85(L), 85(R)
- Backlight: LED

Touch

- 5-wire resistive
- Touch light transmission: 80%
- Touch interface: USB

System

- CPU: On-board Intel® Celeron®, quad core processor J1900, 2.0GHz, 2M L2 Cache
- BIOS: AMI BIOS
- System memory: 2 x 204-pin DDR3L SO-DIMM socket, 4GB DDR3L (default), support up to 8GB (4GB+4GB) DDR3L-1066/1333, non-ECC and un-buffered
- Storage device:
  - 1 x External locked CFast socket
  - 1 x Hard drive bay: optional 1 x 2.5" SATA HDD or 1 x SATA DOM
- Watchdog timer: Watchdog timeout can be programmable by software from 1 second to 255 seconds and from 1 minute to 255 minutes (tolerance 15% under room temperature 25°C)
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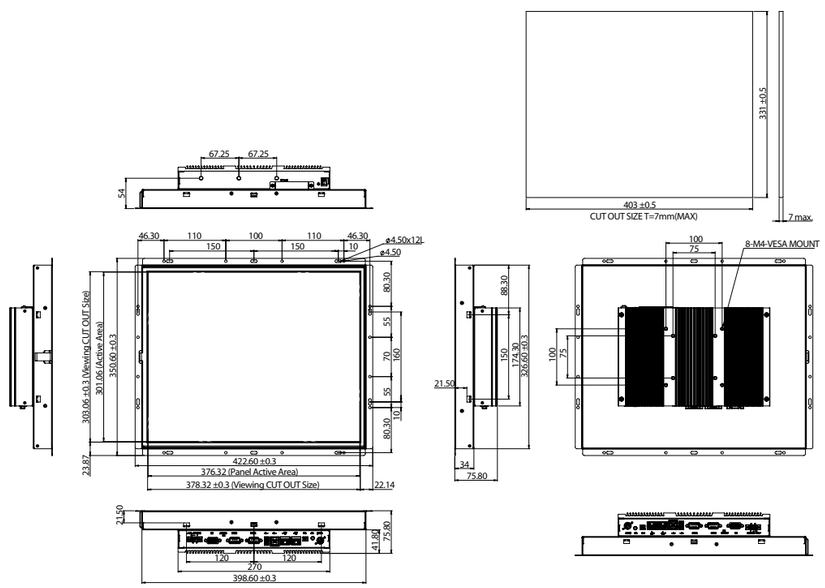

OS Support Lists

- Windows 8 32-bit/64-bit
- Windows 7 32-bit/64-bit
- WinCE 7.0

Ordering Information

Barebone

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  19" SXGA LED backlight touch panel PC with Intel® Celeron® J1900, 2.0GHz, 1000 nits, touch screen, 4GB DDR3L with 2x RS232/422/485

Options

- **12V, 60W AC/DC power adapter w/o power cord (P/N: 7400060031X00)**

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