



The Intelligent Systems

Fully-integrated, Scalable, Rugged **HENGE™** Series
Secure Valuable Assets



Industry Firewall with VPN Router
Industry Network Storage

HENGE™

EXTREME RUGGED



The HENGE™ Family

Industrial facilities, systems, machines and devices are getting more and more connected for the benefit of enhanced efficiency. To ensure enhancements come with consistency, NEXCOM **HENGE™** family has integrated rich functionality, scalability, and ruggedness into the **CoreFort™** Industry Firewall series and the **CoreVault™** Industry Network-Attached Storage series to provide reliable security, storage, and networking for industrial applications.

The CoreFort™ Series

The **CoreFort™** series is a fully integrated industrial multi-port firewall router with VPN function, the **CoreFort™** Industry Firewall provides a remote access infrastructure to secure connections, and helps machine builder/system integrator to design easily maintained systems. Furthermore, its tough fully-rugged design is ideal for harsh environment applications. With wide temperature range to 70°C (158°F) degree, it offers reliable communication network in extreme temperature conditions.



Pairing VPN capabilities, the **CoreFort™** Industry Firewall series is an ideal endpoint connectivity and security solution for industrial automation, process control, energy and medical instrument remote maintenance application.

Protect Critical Assets Against Cyber Threats

In recent years, rising demand in electricity intensively presses power plants to provide more renewable energy at lower price. By leveraging existing IP infrastructure, power plants can maximize plant efficiency and reliability through automation, integration, and optimization of the entire plant. However, the electrical, environmental and operational requirements of process control system can make IT security solutions unsuitable for control networks. As a result, many critical systems operate with little protection against accidental or malicious cyber attacks. Entire plants have been shut down due to an infected USB thumb drive.

The stateful firewall router can not only examine a packet more deeply to eliminate the chance a packet pretending what it's not and possible damage, but also can keep track of incoming and outgoing traffic's connection states. With the aid of stateful firewall/NAT function, the **CoreFort™** Industry Firewall series provides comprehensive protection for critical cyber assets against network security threats.



Increase Operational Efficiency

In a volatile world economy, market presents both challenges and opportunities for companies, such as setting up profitable growth, expanding into new territories, differentiation and more. Traditionally, machine control network for automation is a closed network with narrow bandwidth, which makes remote machine diagnosis more difficult. Now, thanks to the rapid decline in IP network cost. With remote-access solution, machine builder/system integrator can improve business operations by reducing emergency service calls, inefficient on-site technical services, and so on. Furthermore, the advantages include remote accessibility, easy installation and integration, and better scalability, flexibility and cost effectiveness.

For remote machine diagnosis scenarios, the firewall router can be used as a VPN gateway for IPSec/SSL VPN tunnels. With VPN gateway and client functions, the firewall router supplies encrypted network connectivity over a possibly long physical distance and work over both private networks as well as public networks like the Internet. The CoreFort™ Industry Firewall series is designed to provide remote machine monitoring with VPN tunnels to increase operational efficiency, reduced costs and increased margins.



Endure Harsh Environments

Designed for machine-to-machine applications, the CoreFort™ IFA 3610 Industry Firewall offers extended wide temperature range from -20°C to 70°C (-4°F to 158°F).

The CoreFort™ Industry Firewall series is ideal for a variety of applications in secure data communication segment which requires stateful firewall/NAT, industrial protocols filter, reliable and secure VPN tunnels, and easy installation and maintenance.

Connect with Simplicity, Efficiency, Security

With the CoreFort™ VPN dispatcher you can define and manage network connections with extreme flexibility, adapting them to suit your specific needs:

- Create multiple and distributed networks using VPN gateway to gateway
- Enable remote user connections to your network and take advantage of the intuitive VPN client, which is universally compatible with Windows, Mac OS X and Linux
- Define custom per-user profiles to provide enhanced security and more control over user connections



The CoreVault™ Series

The CoreVault™ series consists of extremely rugged network-attached storage (NAS) devices to provide high performance, reliability and capacity of data storage in harsh environments. Equipped with a unique storage technology, the series offers high level of data accuracy for use in industries including oil and gas, transportation, industrial automation and more.



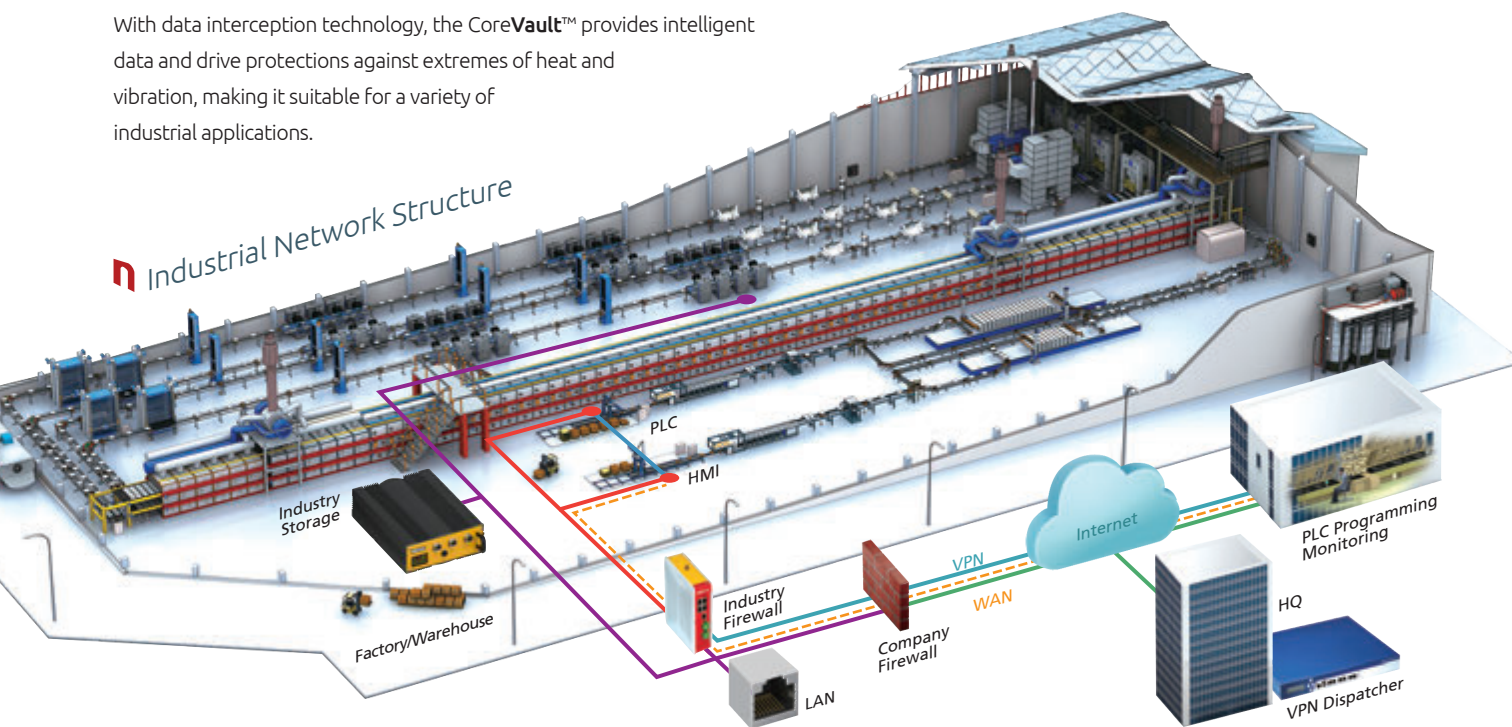
High Performance, Reliability, Capacity & Endurance

Furthermore, the CoreVault™ series offers various data recovery options. The Remote Replication feature supports data backup to remote NAS or FTP servers and synchronizes files to remote folders from local folders with better backup efficiency and reduced backup time. It also supports rsync protocol to back up data to remote servers on a scheduled basis. It is compatible with SMB/CIFS, NFS, and AFP protocols for file sharing across Windows, Mac, and Linux/UNIX networks. The CoreVault™ series also supports Access Control List (ACL), enabling system administrators to easily configure user permissions.

The CoreVault™ series is built with a fanless, power-efficient, dust- and water-resistant chassis with IP 54 rating. This sealed enclosure eliminates the use of failure-prone fans, increasing system reliability and preventing dust and water ingress.

The CoreVault™ series is also compliant with EN50155 (railway applications) and EN61373 (vibrations & shocks) to deliver reliable video surveillance recording for a wide variety of railway transportation applications.

With data interception technology, the CoreVault™ provides intelligent data and drive protections against extremes of heat and vibration, making it suitable for a variety of industrial applications.



Network Security <ul style="list-style-type: none">• Stateful (L4) Packet Firewall• Intrusion Prevention (IPS)• SNMP Support (V1/V2/V3)• Portscan Detection• DoS and DDoS Protection• SYN/ICMP Flood Protection• VLAN Support (IEEE802.1Q)	True SSL/TLS VPN (OpenVPN) <ul style="list-style-type: none">• Encryption: DES, 3DES, AES 128/192/256-bit, CAST5, Blowfish• Authentication: Pre-Shared Key, X.509-Certificates, Certification Authority, and Local• Support for VPN over HTTPS Proxy (Open VPN)• PPTP Passthrough• VPN Site-to-Site• VPN Client-to-Site• VPN Client for Microsoft Windows, Mac OS X and Linux• Multiple Logins per User (Optional)• VPN Failover	VPN- IPSec <ul style="list-style-type: none">• Encryption: 3DES, AES b128/256-bit, MD5, SHA1• Diffie Hellman (2,5,14,15,16,17,18)• Authentication:Pre-Shared Key, RSA Keys X.509-Certificates IKEv1• L2TP• DPD (Dead Peer Detection)• NAT-Traversal• Compression• PFS (Perfect Forward Secrecy)• VPN Site-to-Site• VPN Client-to-Site (Road Warrior)• Integrated Certificate Authority
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Network Address Translation <ul style="list-style-type: none">• Destination NAT• One-to-One NAT• Source NAT (SNAT)• IPSec NAT Traversal	Bridging <ul style="list-style-type: none">• Firewall Stealth Mode• OSI-Layer 2 Firewall-Function• Spanning Tree	Update and Backup <ul style="list-style-type: none">• Scheduled Automatic Backup• Instant Recovery/Backup to USB Stick• Encrypted Backups via e-mail
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Logging and Reporting <ul style="list-style-type: none">• Real-Time Dashboard• Event Handling and Notification• Live Log Viewer	<ul style="list-style-type: none">• Network/System/Performance Statistics• Rule-Based Logging Settings (Firewall Rules)• Syslog: Local or Remote
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Specification

Model Name	Industry Firewall Multi-port VPN Router			VPN Dispatcher
	IFA 1610	IFA 2610	IFA 3610	IVD 1000-S/A
Network Security	Yes	Yes	Yes	Yes
VPN Connections	Unlimited	Unlimited	Unlimited	25/100 Licenses
VPN Function	Client/Site-to-Site	Client/Site-to-Site	Client/Site-to-Site	VPN Management
LAN Bypass	-	-	Yes	Yes
High Availability	-	Yes	Yes	Yes
WAN Failover	-	Yes	Yes	Yes
Network Address Translation	Yes	Yes	Yes	Yes
Routing	-	Yes	Yes	Yes
Logging/Reporting	Yes	Yes	Yes	Yes
Updates and Backup	Yes	Yes	Yes	Yes
Centralized Management	Yes	Yes	Yes	Yes
Hardware Specification				
Mounting	Wall Mount/Desktop	Wall Mount/DIN Rail	Wall Mount/DIN Rail	Rack Mount
Power Input	24V DC Terminal/DC Jack Input	24V DC Input	Dual 24V DC Input	65W Power Supply
CPU	ARM® Cortex™ A8	ARM® Cortex™ A8	ARM® Cortex™ A8	Intel® Atom™
Memory	512MB	512MB	512MB	1GB
Ethernet	2 x 10/100/1000Mbps	3 x 10/100/1000Mbps	5 x 10/100/1000Mbps	6 x 10/100/1000Mbps
Serial Communication	RS232/485/422	RS232/485/422	RS232/485/422	Console Port
USB	2 x USB	1 x USB	1 x USB	2 x USB
Digital Input/Output	-	1 x D1/1 x DO	1 x D1/1 x DO	-
Storage	MicroSD 4GB	MicroSD 4GB	MicroSD 4GB	2.5" HDD (RAID)
Cooling	Fanless	Fanless	Fanless	-
Dimension (H x W x D)	114 x 28 x 100mm	167 x 59 x 140mm	167 x 59 x 140mm	44 x 462 x 238mm
Operating Temperature	0°C~60°C 32°F~140°F	0°C~60°C 32°F~140°F	-20°C~70°C -4°F~158°F	0°C~40°C 32°F~104°F
Storage Temperature	-20°C~70°C -4°F~158°F	-20°C~70°C -4°F~158°F	-40°C~80°C -40°F~176°F	-20°C~70°C -4°F~158°F
Relative Humidity	Operating 10%~90%, non-condensing	Operating 5%~95%, non-condensing	Operating 5%~95%, non-condensing	Operating 10%~90%, non-condensing
SIM Card Holder	-	Yes	Yes	-
Service & Maintenance	3 Years	3 Years	3 Years	3 Years
Regulation				
Safety	UL 508	UL 508	UL 508	UL
Certification	CE/FCC/RoHS	CE/FCC/RoHS	CE/FCC/RoHS	CE/FCC/RoHS
Protection Class	IP 30	IP 30	IP30	-
Ordering Information	10IF0161000X0	10IF0261000X0	10IF0361000X0	TBD

Link Aggregation <ul style="list-style-type: none">• Balance-rr• Active Backup• Balance-xor• Broadcast	<ul style="list-style-type: none">• IEEE 802.3ad• Balance-tlb• Balance-alb	Raid Level <ul style="list-style-type: none">• JBOD• Raid 0• Raid 1• Raid 5
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Firmware Upgrade <ul style="list-style-type: none">• Via System Web UI	Backup Solutions <ul style="list-style-type: none">• Remote Backup• System Configuration Backup (Stage II)
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FTP/SAMBA/AFP/ACL	
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AES Volume Encryption <ul style="list-style-type: none">• Yes (Stage II)	Green Power Management
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Client O.S. Support <ul style="list-style-type: none">• Windows 7+• Windows Server 2003 R2• Windows Server 2008, 2008 R2 & 2012 or Later• Linux & UNIX• Mac OS X 10.7 or Later	Web Browsers Support <ul style="list-style-type: none">• Internet Explorer IE 9.0 Later• Mozilla Firefox• Apple Safari• Google Chrome
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Specification

Model Name	INAS 330
	Rugged Industry Network-Attached Storage
Hardware Specification	
CPU/Memory	ARM® Dual Cortex®-A9 CPU; Onboard 4G eMMC; 512MB DDRIII
Disk/Max Capacity	Up to 3 x 2.5" HDD/SSD; Up to 3T
LEDs	Power LED/System LED/PoE/Temp LED/HDD LED/LAN LED
Ethernet	2 x Gigabit LAN Ports for Data & PoE Redundancy (M12)
	1 x Gigabit LAN Port for Management (M12)
Power Supply	PoE (IEEE 802.3af)/PoE+ (IEEE 802.3at)
Reset Button	Reset to Factory Default (Pressing and Holding the Reset Button for 5 Seconds will Reset to Factory Default)
System Dimensions (H x W x D)	60 x 246 x 194mm (2.36" x 9.69" x 7.64")
Vibration/ Tem. Protection	Yes
Heating Solution	Yes
Housing	Metal, Aluminum, Fanless
Mounting	Wall Mount Kit (Optional)
Environmental Limits	Operating Temperature: -40°C~70°C (-40°F~158°F) For SSD -25°C~55°C (-13°F~131°F) For HDD Storage Temperature: -40°C~85°C (-40°F~176°F) Humidity: 5%~95%, non-condensing
Service & Maintenance	3 Years
Regulation	
Compliance	*EN50155 (Railway Applications); IEC61373 (Vibrations & Shocks); EN60950 *EN61000 (Immunity, Emission); EN60068-2-32/IEC68-2-32 (Environmental Testing)
Certification	*FCC/CE/RoHS/WEEE
IP Rating	IP 54 (NEMA)
Ordering Information	101G0033000X0*

*Available in Q2

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