Application Story

Vehicle Mount Computer Manages Volatility in Mining Logistics Services

NEXCOM all-in-one vehicle mount computer VMC 3000 is installed in tank trucks to optimize mining logistics service by managing the volatile working conditions. With orders, vehicle, traffic and weather information gathered and shared in real time among drivers and dispatchers, the mining logistics service can deliver required material to mining sites in an efficient, safe and eco-friendly manner.

As drivers drive uphill and downhill in Appalachian Mountains to transport water, sand and chemicals to mining sites, traveling alongside is a total tracking system built with the vehicle mount computer VMC 3000. In the cabin, this total tracking system allows drivers to communicate with dispatchers, take the shortest and quickest route, receive new assignments, print shipping documents, check vehicle status and tank volume, prevent material spills with real time monitoring, and get weather alert.

VMC 3000

10.4" Rugged Vehicle Mount Computer with Intel® Atom™, Touch Screen and IP65

In the meanwhile, the information is also shared with dispatchers, who can therefore track vehicle and freight locations; assign new orders to appropriate drivers; keep order reports up-to-date; remotely regulate the traffic on mining sites; detect anomaly vehicle maneuver and offer assistance in case of an vehicle accident. Moreover, the total tracking system is integrated with dashboard and cabin cameras for traffic and driver monitoring and streams live videos to the dispatch center if requested.

With all the information, the total tracking system can optimize the mining logistics service by reducing fuel consumption and shortening transportation time. The system can also increase safety by encouraging traffic regulation compliance with daily operation monitoring;

replacing onsite flagmen with remotely-managed traffic signal systems; and preparing drivers for different weathers at different altitudes. Better still, the environment can be protected when the no-spill policy can be effectively enforced with visual aid.

The total tracking system is made possible by the combination of NEXCOM all-in-one vehicle mount computer VMC 3000 and Red Dog Logistic software. The VMC 3000 is a ruggedized computer, featuring a 10.4" touch screen, GPS, Wi-Fi and 3G connection as well as abundant I/O interfaces. This one-piece heavy-duty design, which is highly praised by the Red Dog Logistics, not only lays the solid cornerstone for vehicle data logging, location-based functions, communication, video storage; it also keeps the cabin neat and tidy when working in conjunction with peripherals, including thermal printer, cameras, tank measure sensor, and RFID reader for driver login.

Combining Red Dog Logistic software, which consists of a user interface, web-based backend server, and relational database, the data amassed by the VMC 3000 can turn into aggregate reports, based on which business insight can be applied to help the mining logistics service driving into higher gear.

About NEXCOM

Founded in 1992, NEXCOM has five business units which focus on vertical markets across industrial computer, in-vehicle computer, multimedia, network and communication, and intelligent digital security industries. NEXCOM serves its customers worldwide through its subsidiaries in seven major industrial countries. NEXCOM gains stronghold in vertical markets with its industry-leading products including the rugged fanless computer NISE series, the in-vehicle computer VTC series, the network and security appliance NSA series and the digital signage player NDiS series.

About Red Dog Logistic

Red Dog Logistics is a company founded in spring of 2012 in Mansfield, Pennsylvania. Principals of the company have many years of experience in oil and gas exploration, data processing, and various areas of logistical management. Asset tracking systems with integrated billing system were envisioned and then created to save time, reduce staffing cost, and to create optimum efficiencies in routing of trucking assets. Customer Service Sales Representative: 570-404-7889; Technical Service Representative: 570-404-9494; Website: www.reddoglogistics.com