Fleet Management Solution: Off-road Vehicle

Mining Cars

The modern mining industry faces many challenges, of which the safety issue is the most important one. The safety of miners must be guaranteed when they are working underground or on the surface. Therefore, specialized in-vehicle computers that can stably operate in extremely harsh environments must be incorporated into advanced mine cars, so as to ensure completing tasks safely. Specially designed for environments in the mining industry, Darveen's vehicle mounted computers are in an all-weather protection case and integrate GPS and GIS systems to guarantee avoiding collisions during transportation, and thus reducing accidents. The CAN module is used for communication among vehicles and real-time monitoring of vehicles' operation, so as to ensure maintenance and care for vehicles. Furthermore, 3G/WiFi communication performance is integrated to guarantee timely communication with the control center, allowing management personnel to obtain information in a timely manner to ensure the most efficient operation of vehicles.

Farming Vehicles

Farming vehicles can easily complete their tasks in a large area of land by equipping them with specialized in-vehicle computers that can integrate the communication capabilities of GPS positioning technique, GIS (Geographic Information System) and 3G. Furthermore, to ensure the uniform quality of crops, relevant sensors must be incorporated into in-vehicle

computers to collect soil nutrient data, which is the basis of adequate fertilization. By integrating 3G communication with the GPS positioning module and offering multiple I/O peripheral interfaces for connection with sensors, Darveen's vehicle mounted computers provide a simple intelligent system for farming vehicles to greatly increase the quality and output of crops with the help of modern farming technologies.

Solution and Advantages

- **Various vehicle computers**

  To meet demands of various service conditions, Darveen offers many types of vehicle mounted computers with different display sizes or stand-alone fanless computers with rugged monitors, giving customers more choices. Those vehicle computers are equipped with a touch screen or an integrated keyboard. The customer may choose the most suitable computer according to his/her actual operating conditions.

- **Rich and various comports**

  In order to connect to various sensors around the vehicle, Darveen engineers equip vehicle computer with various and rich comports, including RS-232/422/484, CAN, GPIO, Bluetooth, Ethernet(POE), Video channel…, .

- **Comprehensive Wireless Communication**

  In order to improve data communication between vehicle mounted computers and control centers, Darveen's vehicle mounted computer supports multiple methods of wireless communication, including WIFI, GPRS, 3G and the latest LTE, for more choices by customers. Furthermore, this kind of computer is designed for multiple-antennae, and could be equipped with 4 kinds of RF antennas simultaneously, satisfying the needs of many customers.

- **Power supply with features of waterproof, power ignition, UPS and wide-voltage**

  As unstable power supply of trucks and harsh environment, Darveen especially design wide-voltage, lightning protector and aviation-connector for power supply to improve their performance. Power ignition to delay booting or shutdown, and a UPS battery to keep the computer on during replacement of forklift battery.

- **Wireless camera**

  In order to easily install camera to any area of vehicles, we design wireless camera solutions which only need to provide power to cameras without signal cables.

- **GLONASS/GPS/BD multiple positioning system**

Bedouin satellite/GPS double module localization

radio furcation calculation

VT-736

RS232/485/CAN

Seeding controller

Hydraulic controllor

Steering controller

steering the turning of wheel