

IN-VEHICLE COMPUTER

Fleet management with configurable protocols

Advantech-Dlog (Germany) has announced the release of Trek-570, an in-vehicle computing box for fleet management. It was designed for use in vehicles that require a robust industrial design.

TREK-570 IS BUILT TO MEET DEMANDS FOR INTELLIGENT fleet management. Equipped with an Intel Atom E3826 System-on-Chip processor and configurable CAN protocols, the computing box supports delivery operations and intra-vehicle communication. The in-vehicle computer supports real-time data transmissions across borders with its built-in RF features and dual SIM card design.



The embedded dual CAN interface supports configurable CAN protocols (Photo: Advantech-Dlog)

The embedded dual CAN interface supports configurable CAN (J1939, OBD-II/ISO 15765) and J1708 (J1587) protocols. The embedded CAN controller supports the dual CAN interface and also several configurable protocols, including J1587, raw CAN, J1939, and OBD-II, enabling communication with various vehicle components over CAN via a twisted pair medium.

The CAN interface offers direct linking into the vehicle network. This enables access to a wide range of vehicle data and events, such as fuel consumption, speed, engine data etc. This data can be gathered within the fleet management system and processed and/or displayed according to individual requirements. According to the company, by processing this gathered data for a specific purpose (e.g. for driver training), it is possible to reduce running costs, such as by cutting fuel consumption, reducing maintenance costs and even lowering the number of accidents and thus the cost of insurance.

The computer has built-in GNSS, WLAN, Bluetooth, and WWAN (HSPA+/LTE) modules and dual SIM card slots for real-time vehicle tracking, data transmissions, and seamless communication. The range of connections include CAN, LAN, EIA-232, EIA-485, digital I/O, line-out, Mic In, VGA, HDMI, USB 2.0, and USB 3.0.

The vehicle power management technology supports ignition on/off delay, wakeup event controls, and system health and diagnostics monitoring. Real-time rear-view monitoring with single-channel bypass mode CVBS input for increased vehicle parking safety is also possible. The box has an operating temperature from -30 °C to about +70 °C. It is compatible with 12 V/24 V vehicle power (ISO 7637-2) and has shock/vibration tolerance (MIL-STD-810G and 5M3). Advantech-Dlog is a mobile computing platform provider. The company develops robust and mobile industry computer solutions for applications in intra logistics, on large machines, and in industrial manufacturing.