

RUGGED COMPUTER

HMI for logistics and heavy-duty applications

Ruggon (Taiwan) launched the Vulcan X vehicle-mount computer with a 10,4-inch display. It supports the J1939 higher-layer protocol.



The auto-dimming touch-screen automatically adjusts visibility for day or night, in-door and out-door (Source: Ruggon)

The device integrates the 1,6-GHz 8th generation Intel Core i5-8365UE processor, which is compatible with the Windows 10 IoT (Internet of Things) Enterprise. The HMI (human machine interface) features one CAN interface implementing the SAE J1939 higher-layer protocol. It also supports GB-Ethernet, USB 3.1, USB 2.0, EIA-232, EIA-422, EIA-485, Bluetooth 5.0, and dual-band Wifi 5 (802.11 ac) with Wifi fast-roaming.

The provided IP66 protection, MIL-STD 810H, and IEC-60721-3-5 5M3 certifications, ensure the work of the device in harsh environments with temperatures ranging from -30 °C to +55 °C. The computer is built to operate 24/7 and withstand salt spray as well as fog and frost. The vehicle mount is manufactured with metal connectors to withstand oil and grease. The power input range from 9 V_{DC} to 60 V_{DC} allows to use the HMI in almost any vehicle type, said the company.

The modular design enables to change the I/O-ports location for a suitable installation and prevention of damage to cables from bending and wear. The device is equipped with M12 connectors to avoid user confusion and wrong cabling. The HMI's auto-

dimming touch-screen automatically adjusts visibility for day or night, in-door and out-door. A screen defroster option for cold storage applications is available. The included Ruggon Dashon utility software allows to define up to 14 vehicle-mount computer function keys.

Using the device, location positioning on various cranes and forklifts is possible without operation downtimes. Material handling applications can be managed with auxiliary RFID or barcode scanners that can be plugged into EIA-232 ports. The device is also suitable for cold chain applications, logistics, warehousing, and heavy-duty vehicles in agriculture, recycling, waste management, and mining.

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