Intel Atom[®] E3815 Telematics IoT Gateway Super Slim and Ruggedized Design

VTC1910-S





Main Features

- Super slim and ruggedized design
- Intel Atom[®] processor Bay Trail E3815 (1.46GHz)
- Built-in 1 x CAN 2.0B, optional SAE J1939/ J1708 module
- Smart power management with Ignition on/off delay via software control and low voltage protection
- Built-in U-blox M8N GPS
- Dual SIM cards for WWAN modules
- Wide range DC input from 9 ~ 36V
- Wide operating temperature -40°C ~ 70°C
- Certified by CE/ FCC/ E13 mark

Product Overview

VTC 1910-S, a super slim, rugged and entry-level vehicle computer with Intel Atom® processor E3815 (1.46GHz), is designed for the harsh in-vehicle environment. It allows to comply with stringent MIL-STD-810G military standard in rugged, fanless and compact mechanism. Because of the super slim design, it is especially for the vehicles with limited space to locate the computer system, but without compromising with its space to scarify its features.

VTC 1910-S has on board CAN 2.0B and optional OBD interface (SAE J1939/J1708) for vehicle diagnostics and driver behavior management. An advanced GPS receiver supports GPS/Glonass/QZSS/Galileo/Beidou. VTC 1910-S features WLAN and WWAN wireless data and voice connectivity (collocate with VIOB-DA-01). With external 2 x SIM socket which can support a better connectivity quality by software. VTC 1910-S keeps the flexibility to meet different demands for telematics applications, such as IoT Gateway infotainment, fleet management and dispatching system.

Specifications

CPU

• Intel Atom® processor bay trail E3815, 1.46GHz

Memory

 1 x 204-pin DDR3L SO-DIMM socket support 1066MHz/1333MHz up to 8GB. Default 2GB

Storage

- 1 x mSATA
- 1 x SATA DOM

Expansion

- 1 x Full size mini-PCIe socket (USB 2.0)
- 1 x Full size mini-PCIe socket (mSATA + PCIe)

Function

- 1 x u-blox NEO-M8N on board (support GPS/Glonass/QZSS/Galileo/ BeiDou)
- Built-in G-sensor
- TPM2.0

I/O Interface-Front

- 1 x Power button with LED
- 3 x LED for WWAN, WLAN, SSD

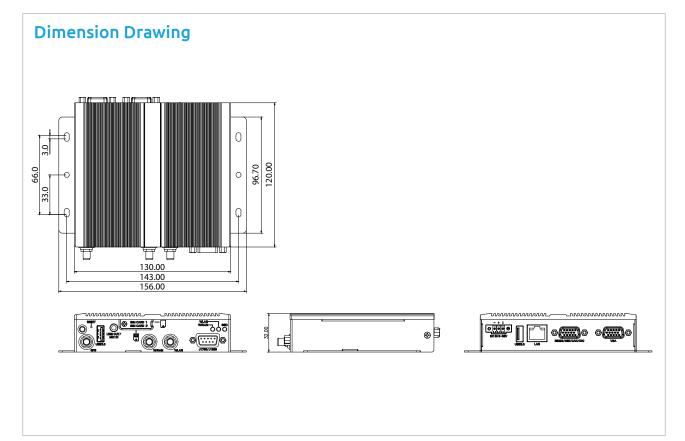
- 1 x Reset button
- 2 x SIM socket (Micro type) with cover
- 1 x DB9 connector for optional SAE J1939 and J1708 modules
- 1 x Line-out/MIC-In
- 1 x Type A USB 2.0 compliant host, supporting system boot up
- 3 x antenna hole for GPS/WWAN/WLAN

I/O Interface-Rear

- 1 x Phoenix connector for Power/GND/Ignition input
- 1 x Type A USB 3.0 compliant host, supporting system boot up
- 1 x RJ45 10/100/1000 Fast Ethernet with LED
- 1 x DB15 VGA, resolution up to 2560 x 1600 @60Hz
- 1 x DB15 for 2 x RS232 (TX/RX), 1 x RS485 (TX/RX),1 x CAN 2.0B, 3 x DI, 3 x DO

Operating System

- Windows 7, WES7
- Windows 8, WES8
- Windows 10
- Linux (by request)



Environment

- Temperature: Operating temperatures: -40°C to 70°C Storage temperatures: -45°C to 85°C Damp Heat Test per EN60068-2-30
- Humidity: IEC60068-2-3, Damp Heat Steady State Test, 40C, 95%, 48Hrs
- Vibration: IEC 60068-2-64, 2G
 Operating: MIL-STD-810G, 514.6C Procedure 1, Category 4 Storage: MIL-STD-810G, 514.6E Procedure 1, Category 24
- Shock:
- MIL-STD-810G, 516.6 Procedure I, trucks and semi-trailers=40g Crash hazard: Procedure V, ground equipment=75g

Dimensions

- 130mm (W) x 120mm (D) x 32mm (H) (5.12" x 4.72" x 1.26")
- Weight: 0.6 kg (1.3 lbs)

Certifications

- CE approvalFCC Class B
- E13 mark

Power Management

- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level power on/ off delay time by software
- Status of ignition and low voltage can be detected by software
- Support S3/S4 suspend mode

Ordering Information

• VTC 1910-S (P/N: 10V00191002X0)

Intel Atom® processor bay trail E3815, 1.46GHz with 2GB DDR3L SO-DIMM, U-blox M8N GPS on board, VGA output, 1 x LAN, 2 x RS-232 (Tx/ Rx), 1 x RS-485 (Tx/Rx), 1 x CAN 2.0B, 3 x DI, 3 x DO, 1 x USB 2.0, 1 x USB 3.0, 1 x Line-out/Mic-in

NE(COM