

## Main Features

- ◆ Compact and Fanless Design
- ◆ Built-in GPS Receiver with Optional Dead Reckoning Function
- ◆ Support CAN Bus
- ◆ Variety Wireless Communication Options
- ◆ Wake on RTC/ SMS via WWAN Module (Option)
- ◆ Wide Range DC Input from 6~ 36V
- ◆ Smart Power Management with Ignition On/Off Delay via Software Control and Low Voltage Protection
- ◆ Certified by CE/ FCC/ e13 Mark

## Product Overview

VTC 1000, a compact rugged computer box, is designed for the transportation segment, especial for the vehicle with limited space to house the computer system. Same as all VTC series, the fanless and wide temperature support are reserved in VTC 1000 design. VTC 1000 adopts the Intel® latest processor, Tunnel Creek X600 series. VTC 1000 does not compromise with its space to scarify its functional features. Needless to say RS-232/422/485 and LAN port, it also offers the CAN bus to fit this vehicle demand. In order to speed the application access, FRAM design is reserved. An advanced GPS receiver with dead reckoning is available as an option as well as the wireless communication. VTC 1000 is the best choice with the cost effective solution for your vehicle application.

## Specifications

### Main Chipset

- ◆ EG20T

### CPU

- ◆ Intel® Atom™ E640 1.0GHz

### Memory

- ◆ On-board DDR2 1GB

### Expansion

- ◆ Mini-PCIe socket (PCIe + USB) x 1 (for WLAN module)
- ◆ Mini-PCIe socket (USB) x 1 (for 3.5G module)
- ◆ 1 x Bluetooth module (optional)
- ◆ 1 x GPS module

### I/O Interface-Front

- ◆ 2 x LED indicators for power status and wireless communication
- ◆ 1 x COM port (RS-232)
- ◆ 2 x USB port
- ◆ 1 x RJ45 for 10/ 100/ 1000 Ethernet
- ◆ 1 x SIM card socket
- ◆ 1 x System reset button
- ◆ 1 x Mic-in, 1 x Line-out
- ◆ 1 x Power button
- ◆ 3 x antenna hole reserved for SMA-type antenna connector (HSDPA/ WLAN/ BT)

### I/O Interface-Rear

- ◆ 1 x com port (2 x RS422/ RS485)
- ◆ 1 x com port ( 1 x CAN bus and 2 x GPIO)
- ◆ 1 x DB15 VGA port
- ◆ 1 x DC output (5V/1A, 12V/1A)
- ◆ 1 x DC input via 3-pin connector

### Expandable Storage

- ◆ 1 x 2.5" SATA SSD Bay

### Power Management

- ◆ Selectable boot-up & shut-down voltage for low power protection
- ◆ HW design ready for 8-level delay time on/off at user's self configuration
- ◆ Power on/ off ignition, software detectable
- ◆ Support S3/ S4 suspend mode; wake on RTC/ SMS

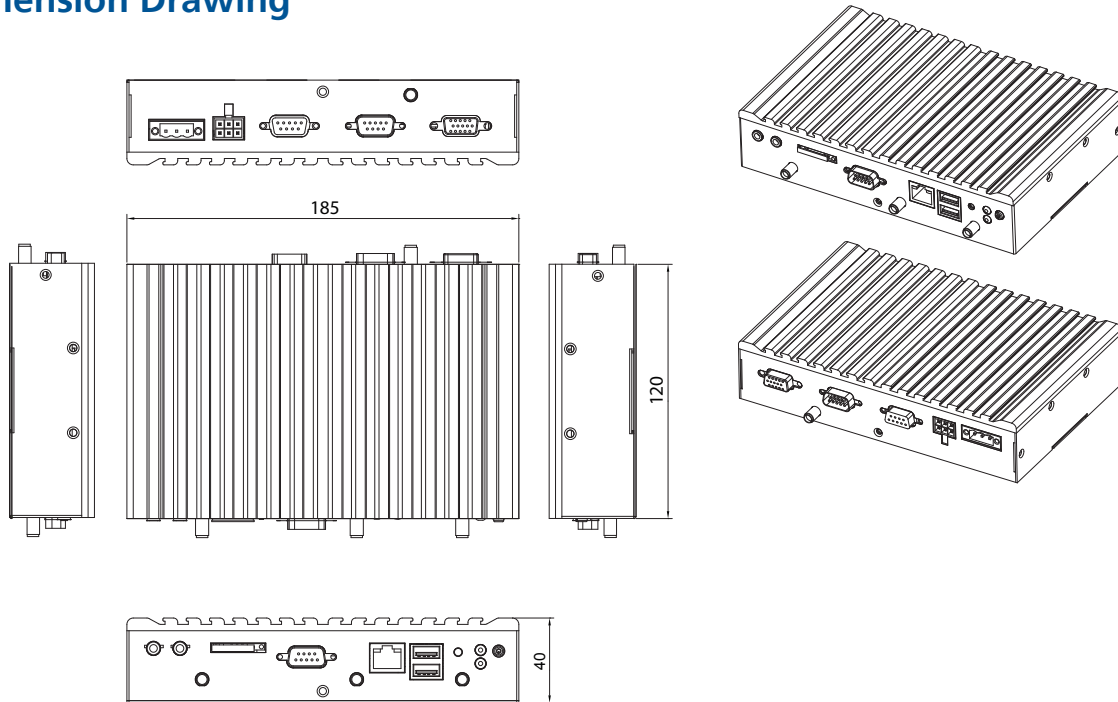
### Dimensions

- ◆ 180 mm (W) x 120 mm (D) x 40 mm (H) (7.1" x 4.7" x 1.6")
- ◆ 1 Kg (2.20 Lb)

### Construction

- ◆ Aluminum Top Case with Metal Sheet

## Dimension Drawing



### Environment

- Operating temperatures  
Ambient with air: -20°C to 70°C (SSD)
- Storage temperatures: -40°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 2g @5~500 Hz with SSD
- Vibration  
Operating: MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle – Highway Truck  
Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test

### Shock

- Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers= 20g
- Crash Hazard: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment= 75g

### Certifications

- CE approval
- FCC Class B
- e13 Mark

## Ordering Information

### • VTC 1000 (P/N: 10V00100000X0)

Intel® Atom™ E640 1.0Ghz processor with 1GB DDR2, GPS module and GPS antenna

### • Optional Accessories

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10Z00330200X0	NAK 3302, GSM/ GPRS mini-PCIe card module for VTC 6xxx & VTC 2xxx series
10VK0061B00X0	VTK61B, back-up battery kit for 4 hours in system full loading
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, w/ antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V kit, GPRS/ UMTS/ HSDPA, w/internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01(V7), w/ antenna & cable (without assembly in NEXCOM)
10VK0006004X0	GPS kit, GlobalSat: EM-313 w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter: 120-AAB(N09001), 120W 19V/ 6.3A
60233SAM03X00	Internal cable for GSM/ WLAN/ GPS antenna connection MOQ: 20 pcs
60233SAM05X00	GPS antenna/ 5m/ SMA180P
60233SAM07X00	GSM/ GPRS antenna, SMA, support 850/ 900/ 1800/ 1900
60233SAM30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100