



## Main Features

- ♦ Intel® Atom™ N270 processor
- ♦ Availability of GSM/ GPRS/ UMTS/ HSDPA/ GPS/ BT
- ♦ e13 certification
- ♦ Power ignition on/off and delay-time control
- ♦ Low voltage protection
- ♦ High anti-vibration performance

## Product Overview

VTC 2000 is designed as a low cost, ultra reliable solution for in-vehicle digital signage applications. Based on a low power Intel® Atom™ processor, the VTC 2000 boasts high availability, a wide operating temperature and improved vibration protection. In addition, the design is certified to eMark standards enabling it to be utilized within vehicles. The integrated power ignition feature is one of the unique points that differentiate VTC 2000 from off-the-shelf assembled products. The VTC 2000 has an integrated GPS function and can be further expanded with WLAN and Bluetooth module.

## Specifications

### CPU

- ♦ Intel® Atom™ N270 1.6GHz

### Main Chipset

- ♦ 945GSE/ ICH7M

### Memory

- ♦ One 200-pin DDR2 667MHz SO-DIMM slot (up to 2GB)

### Expansion

- ♦ 1 x Mini-PCIe socket (PCIe + USB) for WLAN option
- ♦ 1 x Mini-PCIe socket (USB) x 1 for WWAN option
- ♦ 1 x Bluetooth module for option
- ♦ 1 x Bundle GPS module or optional GPS with dead reckoning
- ♦ 1 x internal SIM card socket

### I/O Interface-Front

- ♦ 2 x LED indicators for power status and storage

### I/O Interface-Rear

- ♦ 1 x Power button
- ♦ 1 x 6~36VDC input with Ignition and 17W typical power consumption
- ♦ 1 x 5V/1A and 12V/1A DC output, SMBus
- ♦ 3 x USB 2.0 host type A connector
- ♦ 2 x DB9 RS-232 (COM1, COM2)
- ♦ 1 x DB9 RS-485 w/ auto flow control (optional RS-232, COM3)
- ♦ 1 x DB9 female connector for 4GPI and 4GPO

- ♦ 1 x DB15 VGA
- ♦ 1 x DVI-D
- ♦ 1 x Line-out, 1 x Mic-in
- ♦ 1 x RJ45 with LEDs for 10/ 100/ 1000Mbps Ethernet
- ♦ 4 x Antenna hole reserved for SMA-type antenna connector (GPS/ WWAN/ WLAN/ BT)

### Expandable Storage

- ♦ 1 x 2.5" SATA II HDD bay
- ♦ 1 x Type II CompactFlash socket

### Power Management

- ♦ Boot-up & shut-down voltage setting selectable for low power protection by software
- ♦ Setting 8-level on/off delay time by software
- ♦ Status of ignition and low voltage status can be detected by software

### Operating System

- ♦ Windows XP/ WES2009
- ♦ WES 7E

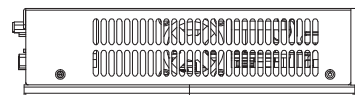
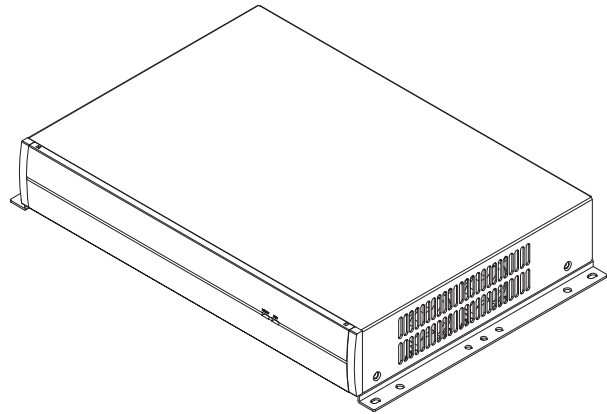
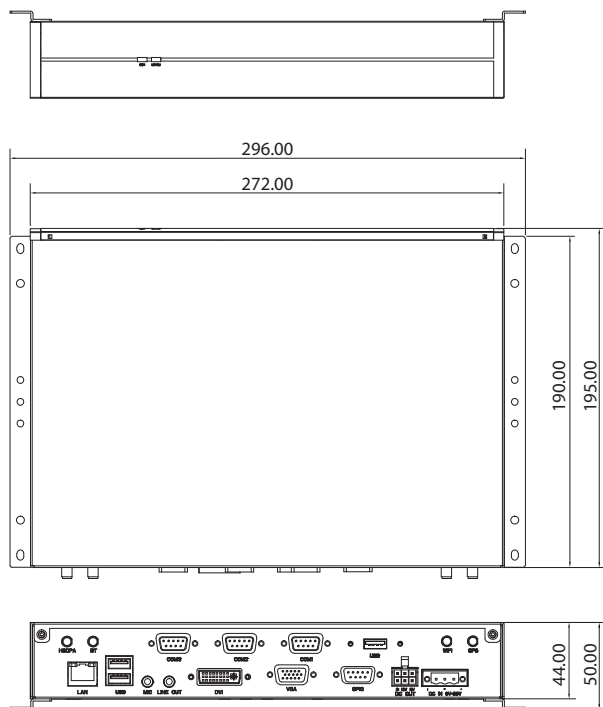
### Dimensions

- ♦ 272mm (W) x 195mm (D) x 44mm (H) (10.7" x 7.68" x 1.73")
- ♦ 2.2 Kg (4.85 Lb)

### Construction

- ♦ Metal sheet

## Dimension Drawing



### Environment

- Operating temperature:  
-10°C to +45°C
- Storage temperature:  
-20°C to +80°C@relative humidity 10% to 90% non-condensing  
Relative humidity: 10% to 90% (non-condensing)
- Vibration (in operation):  
2G@5~500Hz random with CF/ SSD  
1G@5~500Hz random with automotive HDD

### Standards/ Certifications

- CE approval
- FCC class A
- e13 Mark

## Ordering Information

### ♦ VTC 2000 (P/N: 10V00200000X0)

Intel® Atom™ N270 1.6GHz processor, 1GB DDR2, GPS module and GPS antenna

### ♦ Optional Accessories

Part No.	Description
10VD0100000X0	VMD 1000-B 7" monitor w/ touch screen
10VD0100101X0	VMD 1001-B 7" Monitor w/ touch screen, VGA interface
10VD0200000X0	VMD 2000-B 8" Monitor w/ touch screen
10VD0200200X0	VMD 2002-B 8" Monitor w/ touch screen, cable integration
10VK0061B00X0	VTX 61B, 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)
10VK0WWAN01X0	Cinterion PH58-P kit, Five bands, UMTS/HSPA (850/800, 900, 1900 and 2100 MHz), Quad-Band GSM w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK00GPS00X0	SKYTRAQ GPS + GLONASS, w/ antenna & cable
10VK0006007X0	Bluetooth kit, QCOM: QBTM400-01(V7), w/ antenna & cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 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 and 2100 MHz