



VTC 6000 with optional IP65 enclosure



## Main Features

- ♦ Build-in Intel® Atom™ Z510/Z530 processor
- ♦ Availability of GSM/GPRS/WCDMA/HSDPA/GPS
- ♦ e13 mark certification
- ♦ External smart battery back up support
- ♦ Power ignition on/off delay control
- ♦ Circuitry design for low power protection
- ♦ 6~36V DC power input
- ♦ 1 PCI-104 expansion slot
- ♦ Multiple display interface connections (VGA, TV-out and LVDS)
- ♦ Optional IP65 enclosure

## Product Overview

The VTC 6000 is an innovative in-vehicle computer for use in any car, truck, or even for maritime applications. The design itself makes the system available as a complete system allowed the user easily define and build requirements. Thanks to the extremely-low power consumption nature from Intel® Atom™ processor, the VTC 6000 mechanical design is even more compact yet reach wider operating temperature range than ever. The VTC 6000 fulfills vehicle industry requirements. The design itself is in compliance with vehicle industrial standard such as eMark. More features required for in-vehicle operations, such as power ignition delay control, low-power protection and SMBus connection, etc., are continued from others of NEXCOM's in-vehicle computer products. The GPS function navigates drivers to ultimate the fleet management. Optional 802.11b/g/n and 3.5G availability make the VTC 6000 ready for wider coverage and future trend. Multiple display connections make the VTC 6000 an ideal choice for in-vehicle signage platforms as well.

## Specifications

### Main Chipset

- ♦ US15W SCH

### CPU

- ♦ Intel® Atom™ Z500 Series 1.1GHz (Z510), 1.6GHz (Z530)

### Memory

- ♦ DDR2 400/533 SO-DIMM up to 2GB

### Expansion

- ♦ 1 x PCI-104
- ♦ 1 x Bluetooth module (optional)
- ♦ 2 x Mini-PCI express socket
  - 1 x PCIe interface
  - 1 x PCIe & USB interface

### I/O Interface-Front

- ♦ 4 x SMA-type for WLAN, HSDPA
- ♦ 1 x Power button
- ♦ 1 x Reset switch
- ♦ 1 x SIM socket
- ♦ 1 x USB
- ♦ 4 x LED's for Stand-by, HDD, WLAN/HSDPA and GPO

### I/O Interface-Rear

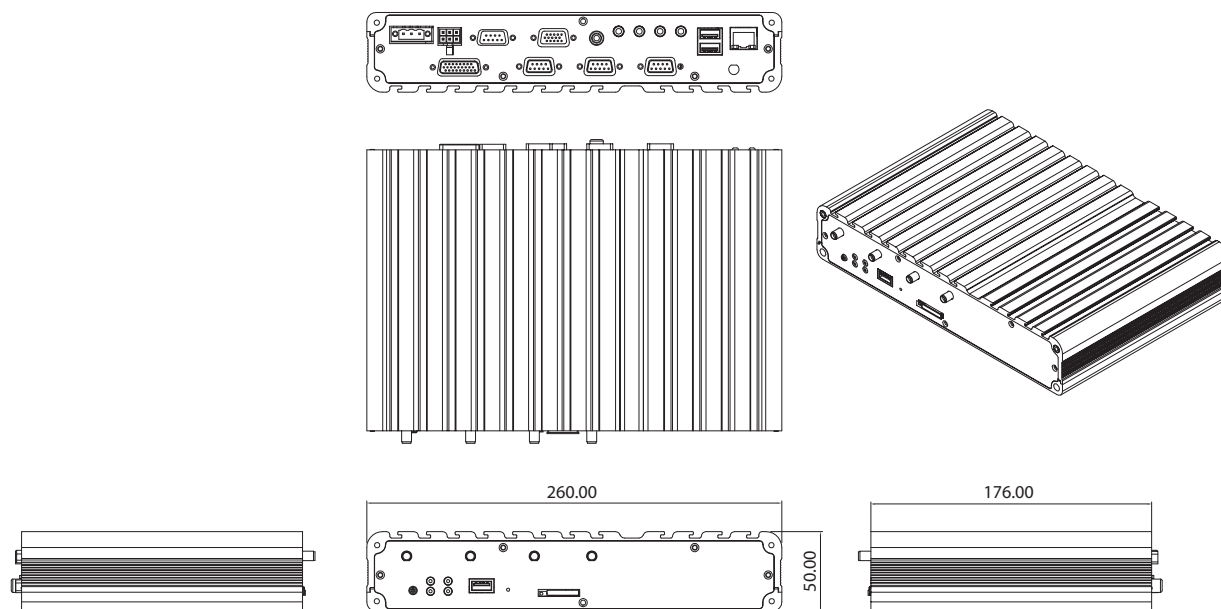
- ♦ 2 x RS232
- ♦ 1 x RS232/485 w/ auto flow control
- ♦ 1 x DB26 LVDS (w/ +12V for backlight power & USB2.0)
- ♦ 1 x DB15 VGA
- ♦ 1 x RCA TV-out
- ♦ 2 x USB2.0
- ♦ 1 x 10/100/1000 Ethernet
- ♦ 2 x Mic-in & 2 Line-out
- ♦ 1 x SMA-type for GPS
- ♦ 1 x GPIO (4 input & 4 output)
- ♦ 6V~36V DC thru 3-pin connector (ignition, power & ground)
- ♦ +5V/+12V DC output, SMBus
  - 5V DC (1A), 12V DC (1A), without VTK 33M-01
  - 5V DC (0.5A), 12V DC (0.5A), with VTK 33M-01

### Expandable Storage

- ♦ 1 x 2.5" SATA II HDD + 1 x CF



## Dimension Drawing



### Power Management

- Selectable for 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, SW detectable
- S3, S4 suspend mode support

### IP Rating

- IP65 compliant (w/ VTK 60P)

### Dimensions

- 260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")

### Construction

- Aluminum enclosure with fan-less design

### Environment

- Operating temperature: -30°C to +60°C with CF or Automotive HDD
- Storage temperature: -40°C to +80°C@relative humidity 10% to 90% non-condensing
- Vibration:
  - Operating:
    - 2G@5-500 Hz random with CF
    - 1G@5-500 Hz random with Automotive HDD
    - 2G@5-500 Hz random with Automotive HDD (w/ vibration kit)
  - MIL-STD-810F, Method 514.5 C-1, Category 20, Ground Vehicle-Highway Truck
- Shock:
  - Operating: MIL-STD-810F Method 516.5, Procedure I, Trucks and semitrailers=20g
  - Non-Operating: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=75g

### Certifications

- CE approval
- FCC Class B
- e13 Mark

## Ordering Information

- **VTC 6000-510 (P/N: 10V0060000X0)**  
Atom™ 1.1GHz & 1GB DDR2 memory & GPS module & GPS antenna
- **VTC 6000-530 (P/N: 10V00600001X0)**  
Atom™ 1.6GHz & 1GB DDR2 memory & GPS module & GPS antenna

### Optional Accessories

Part No.	Description
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ Touch Screen
10VK0033V00X0	VTK 33V, Anti-Vibration/Fan Kit
10VK0033B00X0	VTK 33B, Back-up battery kit for 15 minutes in system full loading
10VK0061B00X0	VTC61B, Back-up battery kit for 4 Hours in system full loading
10Z00330200X0	NAK3302, GSM/GPRS Mini-PCIe card module for VTC6xxx & VTC2xxx series
10VK0006006X0	Wireless Mini Card Kit, Ralink 802.11b/g/n 2T3R, QCOM: Q802XKN, 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 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/GPRS antenna, SMA, support 850/900/1800/1900/2100