

# VTC 6100-DK

Intel® Atom™ N270 Fanless In-vehicle Computer  
with GPS dead-reckoning module



VTC 6100 with optional IP65 enclosure



## Main Features

- Intel® Atom™ N270 processor
- Durable and Fanless Design
- Built-in GPS module with dead-reckoning support
- Power Ignition on/ off and low voltage protection
- Smart Power Management by software setting
- 6~36V wide range DC power input
- Multiple display interface connections (VGA, DVI-D and LVDS)
- PCI-104 and mini card expansion interface
- Optional wireless communication (BT/WLAN/WWAN)
- External smart battery back up support (option)
- MIL-STD-810F standard

## Product Overview

VTC 6100-DK is the extension model of VTC 6100 to support dead-reckoning feature. It remains all main features and durable design as VTC 6100 but additionally implements a GPS module with dead-reckoning feature. With this dead-reckoning support, you still can keep your vehicle position tracking when the GPS signal is unavailable or weak.

## Specifications

### Main Chipset

- 945 GSE + ICH-7M

### CPU

- Intel® Atom™ N270 1.6GHz

### Memory

- DDR2 667 SO-DIMM up to 2G

### Expansion

- 1 x PCI-104
- 1 x Bluetooth module (optional)
- 2 x Mini-PCI express socket
- 1 x GPS module

### I/O Interface-Front

- 1 x USB
- 1 x Power button
- 1 x Reset switch
- 1 x SIM socket
- 1 x Mic-in & 1 x Line-out
- 4 x LED's for Stand-by, HDD, WLAN/HSDPA and GPIO
- 4 x SMA Antenna holes for WLAN, HSDPA, Bluetooth

### I/O Interface-Rear

- 2 x USB2.0
- 1 x RS232
- 1 x RS232/485 w/ auto flow control

- 1 x odometer sensor input
- 1 x DB15 VGA
- 1 x DVI-D
- 1 x 10/100/1000 Ethernet
- 1 x Mic-in & 1 Line-out
- 1 x SMA antenna hole for GPS
- 1 x GPIO (4 input & 4 output)
- 1 x DB26 LVDS (w/ +12V for backlight power & USB2.0)
- 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

### 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

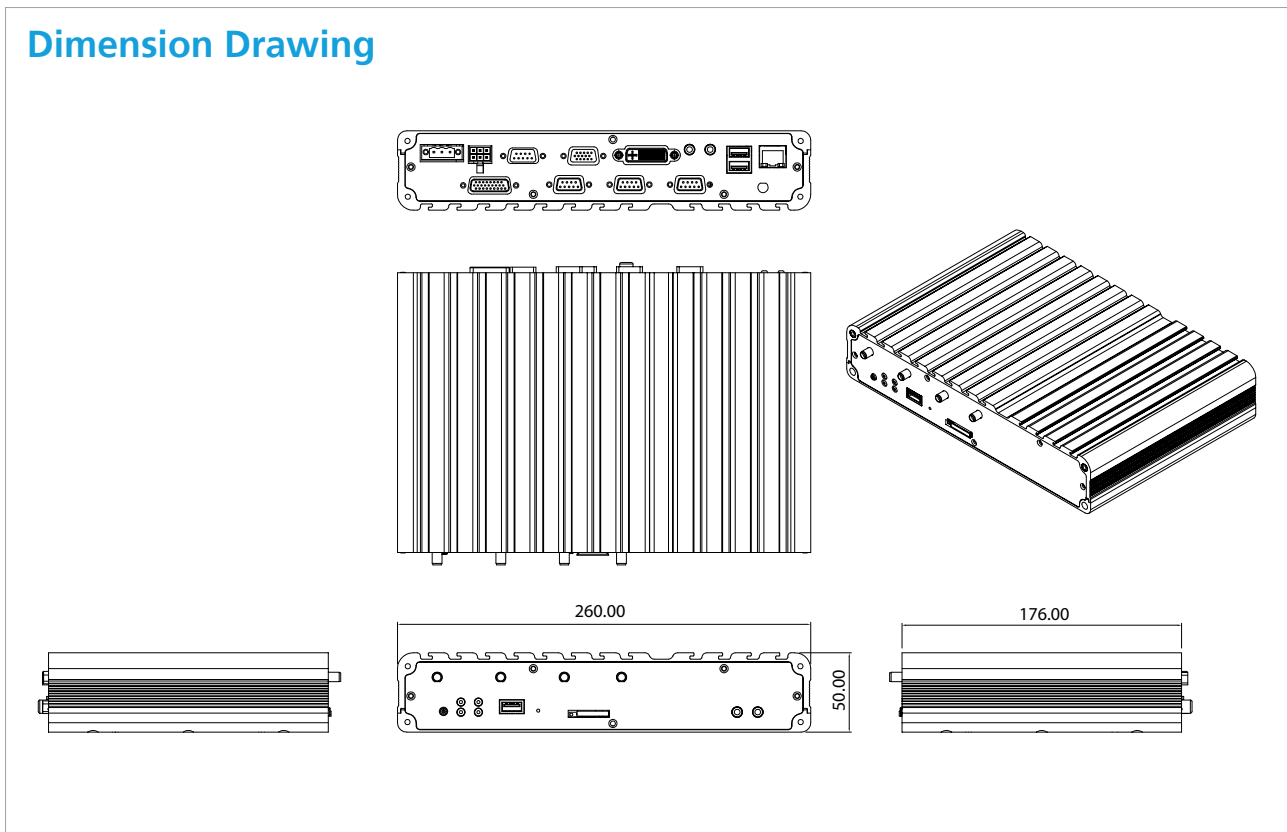
### Dimensions

- 260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")
- 2.42 Kg (5.34 Lb)

### Construction

- Aluminum enclosure with fanless design

## Dimension Drawing



### 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 (w/o vibration kit):  
2G@5-500Hz random with CF  
1G@5-500Hz random with Automotive HDD MIL-STD-810F Method 514.5 Category 20 Gound Vehicle-Highway Truck (in operation)
- Shock:  
Operating: MIL-STD-810F Method 516.5, Procedure I, Trucks and semi-trailers=20g  
Non-Operating: MIL-STD-810F, Method 516.5, Procedure V, Gound equipment=75g

### Protection Grade

- Optional protection kit for IP65 rating

### Certifications

- CE approval
- FCC Class B
- e13 Mark

## Ordering Information

### ♦ VTC 6100-DK (P/N: 10V00610011X0)

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

### ♦ Optional Accessories

Part No.	Description
10VD010000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0033V00X0	VTK 33V, anti-vibration/ fan kit
10VK0061B00X0	VTK 61B, back-up battery kit for 4 hours in system full loading
10VK0061P00X0	VTK 61P, IP65 protection kit for VTC 61XX series & VTC 6200-NI
10Z00330200X0	NAK 3302, GSM/ GPRS mini-PCIe card module for VTC 6xxx & VTC 2xxx series
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)
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
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100