# VMC 1000

## Main Features

- 7" WVGA TFT LCD with LED backlight
- Compact and fanless design
- Built-in Intel® Atom™ E640 1.0GHz processor
- Wake on RTC/SMS
- GPS receiver on board

- Variety wireless communication options
- Wide Range DC input from 9~36V
- Compliant with IP54
- Certified by CE/FCC/e13 Mark

## Product Overview

VMC 1000, a 7-inch all in one vehicle computer, is designed for the transportation application. Adopting the latest low power consumption processor, Intel® Atom™ E640, it integrates the high resolution LCD with the brightness of 400 nits and 4-wire resistive touch sensor. VMC 1000 does not compromise with its space to scarify its functional features. It provides RS-232/422/485, USB 2.0, GPIO and LAN signal via DB37 connector to secure the cable simultaneously in the vehicle vibration. Its mounting hole is compatible with VESA75 and can be installed in the vehicle with limited space via RAM mount kits.

## Specifications

### General
- Cooling System : Fanless
- Enclosure : Plastic PC + ABS with aluminum die casting heatsink
- Mounting : Support VESA 75, stand mounting
- Dual SMA Type antenna connectors of BT/Wi-Fi /WWAN
- Power Input : 9~36VDC input with Ignition
- Power Consumption : 16W
- Ingress Protection : IP54
- Dimension : 185.4mm (W) x 141.4mm (H) x 50.42mm (D) (7.3" x 5.57" x 1.99")
- Weight : 1Kg, 2.20Lb

### LCD Panel
- 7-inch TFT LCD Panel with LED Backlight
- 800 x 480 pixels (WVGA)
- Brightness : 500 cd/m² (typical)
- Contrast ratio : 600 : 1 (typical)

### Touch Screen Sensor
- 4-wire resistant touch
- Anti-glare coating surface
- Transmission rate : 82 ± 3%

### CPU & Chipset
- Intel® Atom™ E640 1.0GHz
- EG20T

### Memory
- On-board DDR2 1GB

### Expandable Storage
- 1 x mSATA

### Expansion
- 1 x Mini-PCIe socket (PCIe + USB + SATA) for WLAN option
- 1 x Mini-PCIe socket (USB) x 1 for WWAN option)

### I/O Interface-Front
- 5 x Control buttons
  Display on/off
  Brightness control (+/-)
  Volume control (+/-)
- Light Sensor
- 2 x LED indicators (Power on/off, Auto brightness control)
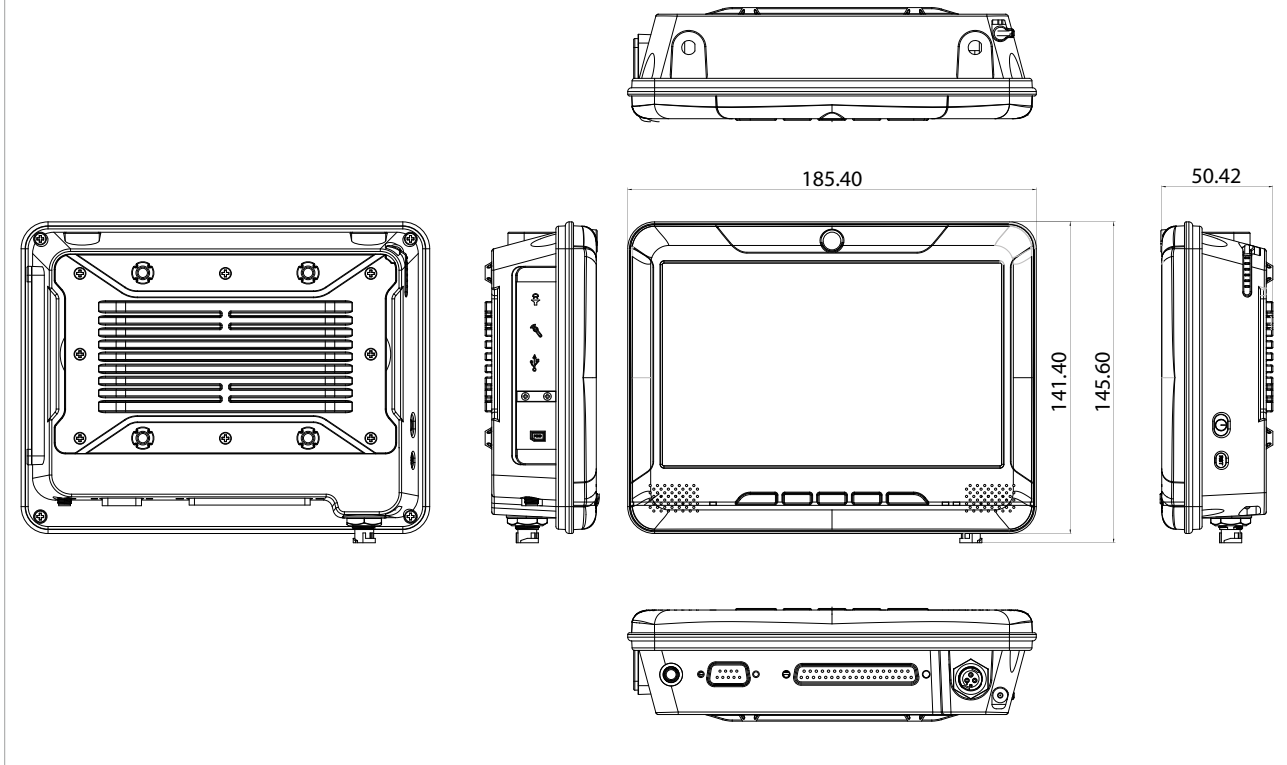- 2 x Built-in 1W speakers

### I/O Interface-Lateral
- 1 x Line-in
- 1 x Line-out
- 1 x USB 2.0 host type A connector
- 1 x SIM card socket
- 1 x Power button
- 1 x System reset button

### I/O Interface-Bottom
- 1 x DB9 RS-232
- 1 x DB37 female connector (1 x LAN; 2 x USB; 1x RS-232; 1 x RS422/485; 3 x GPIO)
- M12 connector 3-pin (power, ignition, ground)
- 1 x SMA-type GPS antenna connector

NEXCOM

## Dimension Drawing



185.40

50.42

141.40

145.60

### Communication Module
- 1 x GPS module
- 1 x WLAN or Bluetooth module for optional
- 1 x WWAN module for optional

### 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 S4 suspend mode; wake on RTC/ SMS

### Operating System
- WES2009
- WES 7E
- XP Pro Embedded
- Win7 Pro Embedded

### Environment
- Operating temperatures : Ambient with air -20°C to 50°C
- Storage temperatures : -30°C to 80°C
- Relative humidity : 10% to 90% (non-condensing)
- Vibration (random) : 2g @5~500Hz
- Vibration
  Operating : MIL-STD-810G, 514.6 Procedure 1, Category 4
  Storage : MIL-STD-810G, 514.6 Procedure 1, Category 24
- Shock
  Operating : MIL-STD-810G, Method 516.6, Procedure I, trucks and semi-trailers= 20g
  Crash hazard : MIL-STD-810G, Method 516.6, Procedure V, ground equipment= 75g

### Standards/Certifications
- CE approval
- FCC Class B
- e13 Mark

## Ordering Information

- **VMC 1000 (P/N : 10VC0100000X0)**
  7-inch all-in-one vehicle mount computer with touch screen and smart brightness control and Intel® Atom™ E640 1.0GHz processor with 1GB DDR2, GPS module and GPS antenna

- **Bundle Accessories**
  External Power cable (13cm)
  External DB37 cable (30cm)
  External GPS antenna (5M)
  External heatsink
  Driver CD

- **Optional Accessories**

| Part No. | Description |
|---|---|
| 10VK0006013X0 | Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM : Q802XKN5F, w/antenna & cable (without assembly in NEXCOM) |
| 10VK0WWAN01X0 | VTK-WWAN : Cinterion PHS8-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) |
| 60233SAM05X00 | External GPS antenna/5m/SMA180P |
| 60233SAM07X00 | External GSM/GPRS antenna, SMA, support 850/900/1800/1900 |
| 60233SMA30X00 | External GPS+GSM combo antenna 5M/SMA180P |
| 60233SAM17X00 | GPRS/UMTS/HSDPA antenna, SMA, support 850/900/1800/1900/2100 |
| 10VK0006007X0 | VTK60-BLUETOOTH-01 Bluetooth Kit (QCOM : QBTM400-01(V6), w/antenna&cable) (A100) |