

# VMC 1000

7" All-In-One Vehicle Computer with  
Touch Screen and Smart Brightness Control



## 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/m<sup>2</sup> (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-PCle socket (PCIe + USB + SATA) for WLAN option
- ♦ 1 x Mini-PCle 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

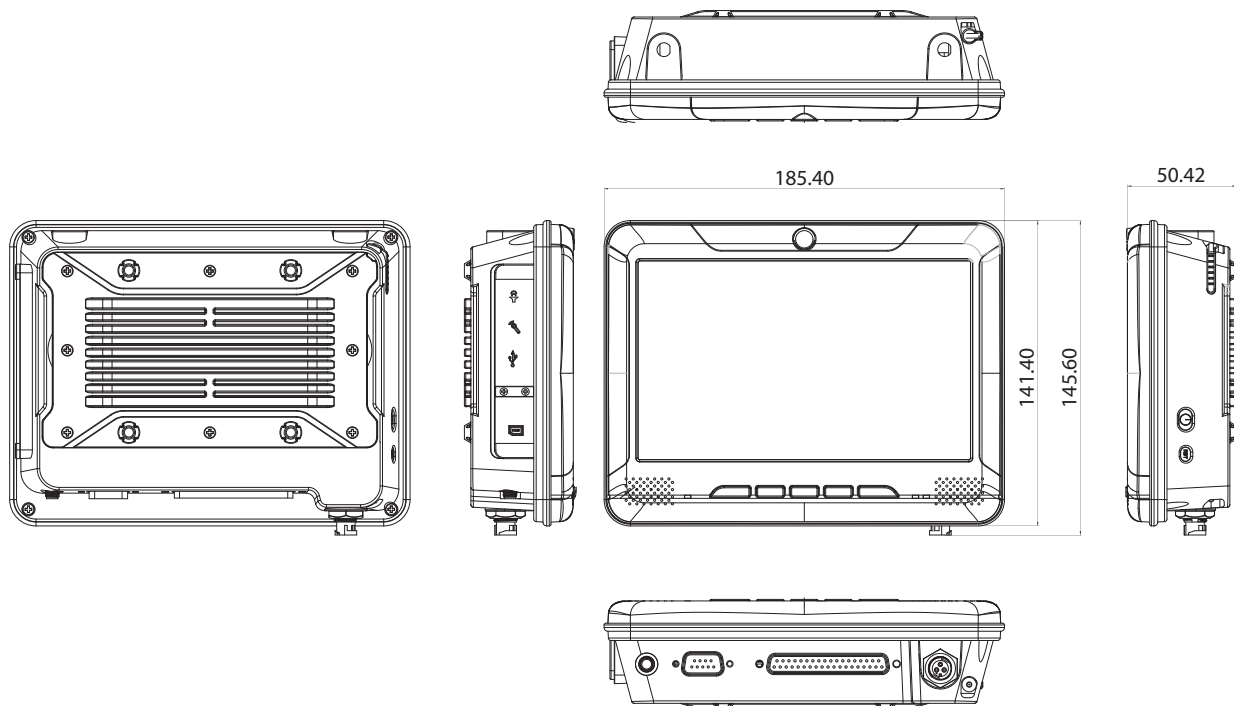
### I/O Interface-Lateral

- ♦ 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; 6 x GPIO)
- ♦ M12 connector 3-pin (power, ignition, ground)
- ♦ 1 x SMA-type GPS antenna connector

## Dimension Drawing



### Communication Module

- 1 x GPS module
- 1 x WLAN and Bluetooth combo 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-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

### Standards/ Certifications

- CE approval
- FCC Class B
- e13 Mark

## Ordering Information

### • VMC 1000 (P/N: 10VC010000X0)

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

Power cable (13cm)  
DB37 cable (30cm)  
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	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