VMC 3500/3501

10.4" Rugged Vehicle Mount Computer
with Intel® Core™ i7, Touch Screen and IP65

VMC 3500

VMC 3501

Main Features

- 10.4" XGA TFT LCD monitor with 5-wire resistive
- Compact and fanless design
- Built-in Intel® Core™ i7-2610UE processor
- Automatic/manual brightness control
- On screen F1 ~ F10 programmable function keys
- GPS, WLAN, and WWAN supported
- CANBus 2.0B, and J1939 for car diagnostic

- Robust design with Die-cast aluminum
- All enclosure compliant with IP65
- Wide range DC input from 9 ~ 36V
- Sunlight readable solution with 1200 nits display
- Military test standard for vibration and shock
- Operating system: Windows & Linux

Product Overview

VMC 3500/3501, 10.4-inch all in one robust vehicle mount computer, is designed for the transportation, warehouses and material handling application. Adopting the latest high performance processor Intel® Core i, it integrates the high resolution LCD with the brightness of 1000 nits (sunlight readable) and 5-wire resistive touch. VMC 4511-K is extreme ruggedness, whose aluminum enclosure compliant with IP65 is designed against vibration, dust, moisture and chemical impacts. It provides RS-232, USB 2.0, DIO, CFast, and LAN to connect with necessary accessories. Besides, CANBus2.0B can help to get immediate car status for diagnosis. VMC 3500/3501 also offer GPS, WLAN and WWAN for remote communication purpose. Thus, the VMC VMC3500/3501 is an ideal solution for vehicle terminal on forklifts, gantry crane, straddle carriers, truck, mining vehicles, and construction machines.

Specifications

General
- Cooling System: Fanless
- Enclosure: Die-cast aluminum
- Mounting: Support VESA 75/100, Panel and stand mounting
- Three SMA Type antenna connectors of BT/Wi-Fi /WWAN
- Power Input: 9 ~ 36VDC input with Ignition
- Power Consumption: 32W typical
- Ingress Protection: IP65 (VMC 3500 only Front Panel IP65)
- Dimension: 290mm (W) x 230mm (H) x 68mm (D) (11.4" x 9" x 2.7")
- Weight: 3Kg, 6.61Lb

LCD Panel
- 10.4-inch TFT LCD panel with LED backlight
- 1024x 768 pixels (XGA)
- Brightness: 400 cd/m² (typical)
- Optional high brightness for sunlight-readable with 1200cd/m² After touch screen is 1000 cd/m²
- Contrast ratio: 600:1 (typical)

Touch Screen Sensor
- 5-wire resistant touch
- Anti-glare coating surface
- Transmission rate: 81 ± 3%

CPU & Chipset
- Intel® Core™ i7 2610UE 1.5GHz
- Intel® QM67

Memory
- On-board DDR3 2GB (up to 8GB)

Expandable Storage
- 1 x CFast
- 1 x 2.5" SATA SSD bay

Expansion
- 1 x mini-PCIe socket (PCIe + USB) for WLAN option
- 1 x mini-PCIe socket (USB) x 1 for WWAN option
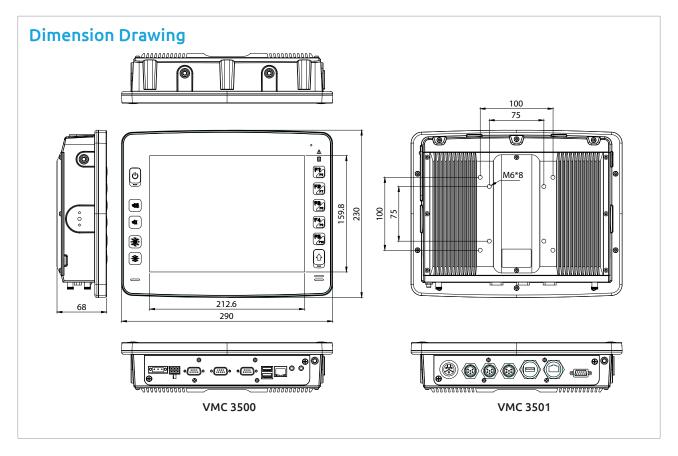- 1 x OBDII module with J1939 for option

I/O Interface-Front
- On screen display buttons x 5
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- 4 x LED indicators (Power on/off, Storage, Warning, Shift)
- F1 ~ F10 functions key
- 2 x Built-in 2W speakers

I/O Interface-Lateral
- 1 x CFast card slot
- System reset button
- USB 2.0 host type A connector

Dimension Drawing

VMC 3500

VMC 3501

I/O Interface-Bottom for VMC 3500
- Power connector (power, ignition, ground)
- 1 x RS-232
- 1 x RS-232 with either 0, 5 or 12V on pin 9 for external devices
- 2 x USB 2.0 type A
- 1 x RJ45 10/100/1000Base-T
- 1 x Mic-in, 1 x Line-out
- 1 x 3GPI and 3GPO or CAN Bus with J1939 optional
  Digital Input (source type; 0 ~ 30V)
  Digital Output (sink type; 20mA max)
- SMBus to support VTK 61B back up smart battery with charger
- 1 x SMA-type GPS antenna connector
- 1 x 6 pins for DC output (5V/1A & 12V/1A)

I/O Interface-Bottom for VMC 3501(Waterproof)
- 1 x SMA-type GPS antenna connector
- 1 x 3 pin for power input (power, ignition, ground)
- 1 x DB9 for full RS232
- 1 x 10/100/1000Base-T (Waterproof type RJ45)
- 1 x USB (Waterproof USB type A)
- 1 x 6 pins for Mic in, line out
- 1 x 10 pins for CAN Bus with J1939 optional, GPI x 3 and GPO x 3
- 1 x 6 pins for DC output (5V/1A & 12V/1A)

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
- Win7 Pro Embedded

Environment
- Operating temperatures: Ambient with air -30°C to 50°C
- Storage temperatures: -30°C to 70°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

Ordering Information
- **VMC 3500 (P/N: 10VC0350000X0)**
  10.4" rugged vehicle mount computer with Intel® Core™ i7, 2GB DDR3, touch screen, Front Panel IP65

- **VMC 3501 (P/N: 10VC0350100X0)**
  10.4" rugged vehicle mount computer with Intel® Core™ i7, 2GB DDR3, touch screen, IP65

- **VMC 3510 (P/N: 10VC0351000X0)**
  10.4" rugged vehicle mount computer with Intel® Core™ i7, 2GB DDR3, touch screen, Front Panel IP65, Sunlight readable

- **VMC 3511 (P/N: 10VC0351100X0)**
  10.4" rugged vehicle mount computer with Intel® Core™ i7, 2GB DDR3, touch screen, IP65, Sunlight readable