

# 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
- ♦ Compact and fanless design
- ♦ Built-in Intel® Core™ i7-2610UE processor
- ♦ Automatic/manual brightness control
- ♦ On screen F1 ~ F10 function key
- ♦ Wake on RTC/SMS/LAN
- ♦ Variety wireless communication options
- ♦ Robust design with Die-cast aluminum
- ♦ All enclosure compliant with IP65
- ♦ Wide range DC input from 9 ~ 36V
- ♦ Optional sunlight readable solution with 1000nits

## 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™ i7, it integrates the high resolution LCD with the brightness of 400 nits and 5-wire resistive touch sensor. VMC 3500/3501 is extreme ruggedness, the aluminum enclosure compliant with IP65 is designed against vibration, dust, moisture and chemical impacts. It does not compromise with its space to scarify its functional features. It provides RS-232, USB 2.0, CFast, LAN and two mini-PCIe extensions for variety communication options. The latitude of mounting methods offers easy installation in the vehicles. Thus, the VMC 3500/3501 is an ideal solution for vehicle terminal on forklifts, straddle carriers, truck, mining vehicles, construction machines and marine.

## 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/m<sup>2</sup> (typical)
- ♦ Optional high brightness for sunlight-readable with 1200cd/m<sup>2</sup>
- ♦ After touch screen is 1000 cd/m<sup>2</sup>
- ♦ 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

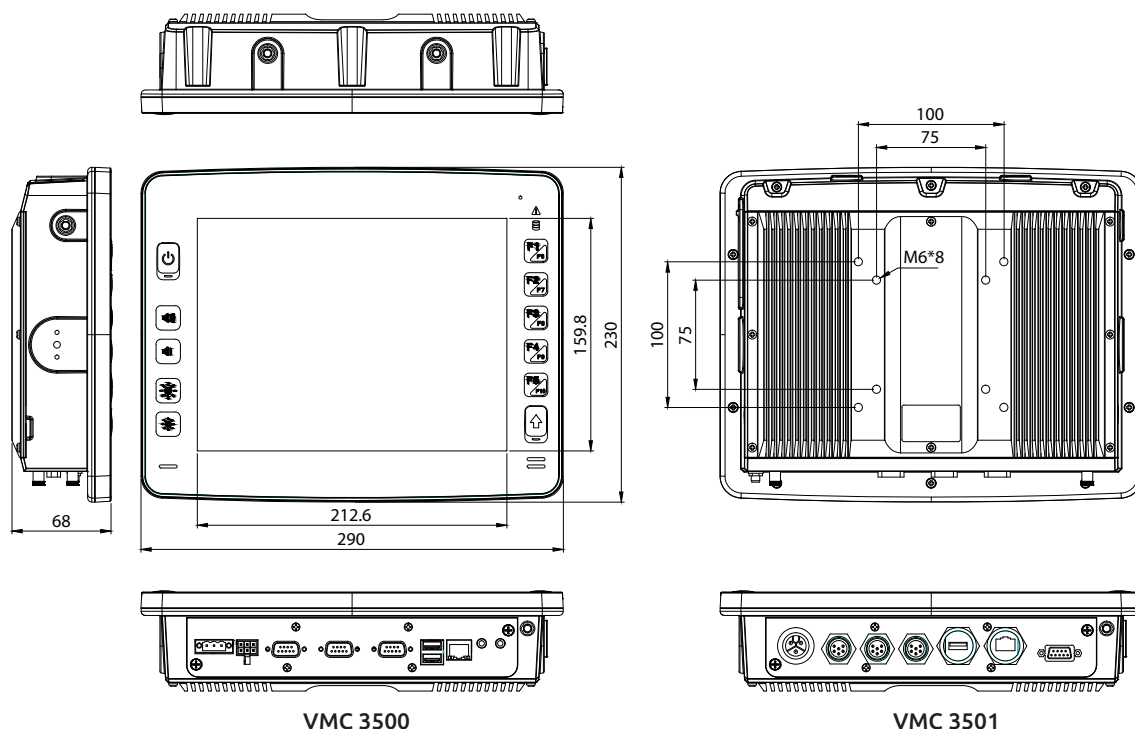
### I/O Interface-Front

- ♦ 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



### 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