# VMC 4010/4011



# **Main Features**

- 12.1" XGA TFT LCD monitor
- Compact and fanless design
- Built-in Intel<sup>®</sup> Atom<sup>™</sup> D2550 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
- Sunlight readable solution with 1000nits display

# **Product Overview**

VMC 4010/4011, 12.1-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® Atom™, it integrates the high resolution LCD with the brightness of 1000 nits and 5-wire resistive touch sensor. VMC 4010/4011 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 4010/4011 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 : 26W typical
- Ingress Protection : IP65 (VMC4000 only front panel IP65)
- Dimension : 290mm (W) x 230mm (H) x 68mm (D) (11.4" x 9" x 2.7")

# • Weight: 3.5Kg, 7.72Lb

- LCD Panel
- 12.1-inch TFT LCD panel with LED backlight
- 1024 x 768 pixels (XGA)
- Brightness: 1300 cd/m<sup>2</sup> (typical)
- Optional high brightness for sunlight-readable with 1200cd/m<sup>2</sup>
- Contrast ratio : 600 : 1 (typical)
- Life time: 100,000 hours

# **Touch Screen Sensor**

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

# **CPU & Chipset**

- Intel<sup>®</sup> Atom™ D2550 1.86GHz
- Intel<sup>®</sup> ICH10R

# Метогу

• One 204-pin DDR3 1333MHz SO-DIMM slot (up to 4GB)

# **Expandable Storage**

• 1 x CFast

• 1 x x 2.5" SATA SSD bay

#### Expansion

- 2 x Mini-PCIe socket (PCIe + USB) for WLAN/mSATA option
- 1 x Mini-PCIe socket (USB) x 1 for WWAN option
- 2 x OBDII module with J1939/J1708 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

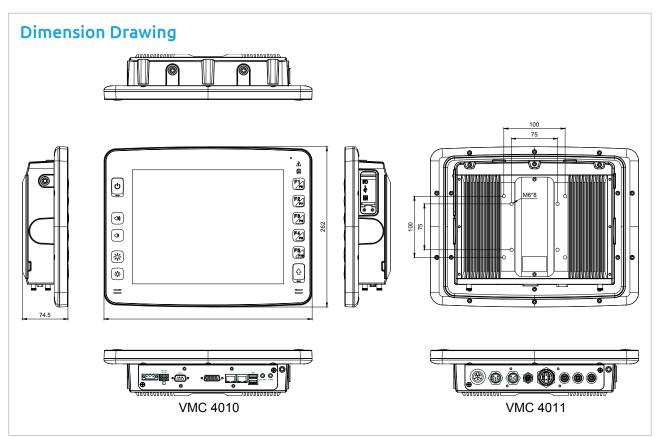
# I/O Interface-Lateral

- 1 x CFast card slot
- System reset button
- USB 2.0 host type A connector

## I/O Interface-Bottom

- 1 x GPS Antenna SMA connector(On housing)
- 1 x Mic-in, 1 x Line out
- 2 x USB2.0/Ethernet (Host)
- 2 x LAN interface for 10/100/1000Base-T
- 1 x DB26 Multi-I/O Connector (VMC4000 Only) - 1 x COM for RS232/422/485 (default RS232)
- 1 x COM for RS232 Tx/Rx
- 1 x GPIO( 2 x DI, 2 x DO)
- 2 x CAN Bus





- 1 x DB9 for RS232 full
- 1 x 6-pin CN 5V/12V DC ouput (VMC4000 only)
- 1 x 9 ~ 36V, 3-pin (Power, Ignition, Ground), 10A
- 1 x Circle Type 22pin Multi-I/O Connector (VMC4001 only)
  - 1 x COM (optional RS232/422/485; default RS232)
  - 1 x COM (RS232 Tx/Rx)
  - 1 x COM RS232 (with either 0, 5 or 12V @ 600mA on pin9)
- 1 x Circle Type 10pin CONN
  - 1 x OBDII module (option)
  - 2 x DI and 2 x DO
  - 1 x 5V/12V DC-out

#### **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

#### Environment

- Operating temperatures : Ambient with air -30°C to 60°C
- Storage temperatures : -30°C to 70°C
- Relative humidity : 10% to 90% (non-condensing)
- Vibration (random): 2g @5~500Hz 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

#### **Operating System**

- WES2009
- WES 7E
- Win7 Pro Embedded

#### NE(COM

# Standards/Certifications

- CE approval, FCC Class B
- CE EN 60950-1 LVD

# **Ordering Information**

# VMC 4010 (P/N : TBD)

12.1" rugged vehicle mount computer with Intel<sup>®</sup> Atom<sup>™</sup> D2550,
1GB DDR3, touch screen, Front Panel IP65, Sunlight readable

VMC 4011 (P/N: 10VC0401100X0)

12.1" rugged vehicle mount computer with Intel® Atom™ D2550, touch screen, IP65, Sunlight readable

## Bundle Accessories

SSD bracket and screws, GPS antenna (5M), Power connector, Driver CD

<ul> <li>Optional Accessories</li> </ul>	
Part No.	Description
TBD	DB26 Multi-I/O Cable
60233AUD27X00	External Audio Cable
60233GPI19X00	External GPIO Cable
TBD	Circle Type 22pin, Multi-I/O Cable
603LAN0001X00	External M12 to LAN Cable
603USB0001X00	External M12 to USB Cable
10VK0006007X0	Blue tooth Kit (QCOM : QBTM400-01(V6), W/Antenna & Cable)
10VK0006013X0	WLAN Kit mini-PCI-E (QCOM Q802XKN5F, W/Antenna & Cable)