



## Main Features

- 7" 1024 x 600 TFT LCD monitor with resistive touch screen
- LCD Brightness 1000 cd/m<sup>2</sup> (typical)
- Built-in Intel Atom® dual core x7211RE 1.0GHz
- Compact and fanless design
- On screen programmable F1 ~ F5 function keys
- Support GNSS/WWAN tracker function for car-safety
- Built-in GNSS (Optional: Dead Reckoning Support)
- GNSS/WLAN/WWAN for wireless communication
- CAN FD for car diagnostic
- Wide range DC input from 9 ~ 36V
- Military standard for vibration and shock
- CE/FCC/E-Mark

## Product Overview

VMC 1110, a new generation 7-inch vehicle mount computer with dual core Intel Atom® processor, is designed for transportation and harbor applications requiring real-time vehicle tracking and job-dispatching. For real-time communication between driver and central control room, VMC 1110 provides the capability of wireless connection from GNSS, WLAN to WWAN. To get more data from accessories, it offers RS-232, RS-485, USB 2.0, GPIO, and LAN connection. CAN FD is able to help to receive car status more quickly and correctly. Due to the unique features above, VMC 1110 is perfect to use in harbor application from container truck, forklift, and container stacker.

## Specifications

### LCD Panel

- 7-inch TFT LCD panel with LED backlight
- 1024 x 600 pixels
- Brightness: 1000 cd/m<sup>2</sup> (typical)
- Viewing angle: 170° (H)/170° (V)
- Contrast ratio: 1000:1 (typical)

### Touch Screen Sensor

- 4-Wire resistant touch
- Anti-glare coating surface
- Transmission rate: 78 ± 3%

### CPU & Chipset

- Intel Atom® dual core x7211RE Processor, 1.0GHz

### Memory

- 1 x DDR5 4800MHz 262-pin SO-DIMM, up to 32GB, 8GB default

### Video Output

- 1 x HDMI 2.0a/b, up to 3840 x 2160@60Hz

### Storage

- 1 x eMMC 128GB
- 1 x microSD card slot, SDXC v3.01
- 2 x M.2 Key B 2242 socket (M.2 socket occupied)

### Expansion

- 1 x M.2 Key B 3042/3050/3052 socket (USB 2.0, USB 3.2 Gen 2, SATA 3.0) for LTE/5G NR module with 1 x external dual nano-SIMs
- 1 x M.2 Key E 2230 socket (USB 2.0, PCIe 3.0 x2), BOM optional M.2 Key E 2230 socket (USB 2.0, PCIe 3.0, PCIe 3.0)
- 1 x M.2 Key B 2242 socket (USB 2.0, PCIe 3.0/SATA 3.0 (auto detect))

### GNSS and Onboard Sensor

- 1 x Default u-blox NEO-M9N GNSS for GPS/Glonass/QZSS/Galileo/Beidou
- Optional M9V modules with dead reckoning available
- G Sensor and gyroscope

### LAN

- 1 x 10/100/1000/2500Mbps M12 X-coded LAN Port, Intel® I226 GbE (support WOL)

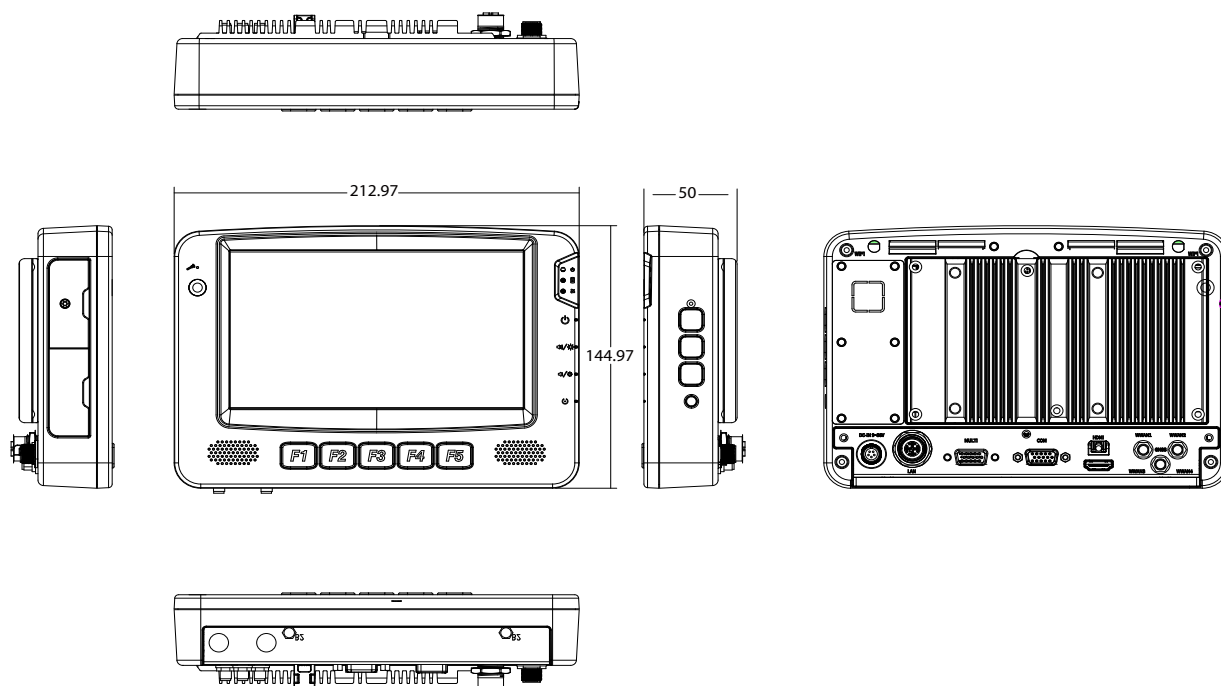
### Security

- TPM 2.0: Infineon SLB9670VQ2.0 FW7.62

### I/O Interface-Front

- F1 ~ F5 functions key
- Light sensor
- Internal Mic-in
- 2 x Built-in 2W speaker
- 3 x LED indicators (power mode, storage, and WWAN status)

## Dimension Drawing



### I/O Interface-Lateral

- ♦ Left Side
  - 1 x Power button
  - 1 x System reset button
  - Volume up/down or brightness up/down
- ♦ Right Side
  - 1 x microSD card socket
  - 1 x Slot for dual nano-SIMs
  - 1 x USB 3.2 Gen 2 Type-A connector
  - 1 x Mic in, Line out

### I/O Interface-Rear

- ♦ 1 x 5-Pin circular connector for power/ignition input
- ♦ 1 x M12 X-coded LAN port
- ♦ 1 x DB15 (COM)
  - Full RS-232/RS-422/RS-485
  - RS-232
  - RS-485
- ♦ 1 x HDMI output
- ♦ 1 x DB15 (Multi Port)
  - 1 x USB 2.0
  - 3 x GPI
  - 2 x GPO
  - 1 x Isolated CAN FD
  - PWM (speed) + Direction + GND
- ♦ 2 x SMA connector for WWAN
- ♦ 2 x SMA connector hole for WLAN
- ♦ 2 x RP-SMA connector for WLAN
- ♦ 1 x SMA connector for GNSS

### Power Management

- ♦ Power input 9~36VDC
- ♦ 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 S3 and S4 suspend mode

### Mechanical

- ♦ Cooling system: fanless
- ♦ Enclosure: plastic with aluminum die casting heatsink
- ♦ Mounting: VESA 75, stand mounting
- ♦ Ingress protection: front panel IP54

### Operating System

- ♦ Windows 11/Windows 10/Linux

### Dimensions

- ♦ 213.0mm (W) x 145.0mm (D) x 50.0 (H)

### Weight

- ♦ 1.50kg

### Environment

- ♦ Operating temperatures: ambient with air -30°C to 60°C
- ♦ Storage temperatures: -40°C to 80°C
- ♦ Relative humidity: 90% (non-condensing)
- ♦ Vibration (random)
  - 2g@5~500 Hz (in operation, eMMC)
- ♦ Vibration (eMMC)
  - Operating: MIL-STD-810H, Method 514.8C, Procedure 1, Category 4, common carrier US highway truck vibration exposure
  - Storage: MIL-STD-810H, Method 514.8E, Procedure 1, Category 24, minimum integrity test
- ♦ Shock (eMMC)
  - Operating: MIL-STD-810H, Method 516.8, Procedure I, functional shock=40g
  - Non-operating: MIL-STD-810H, Method 516.8, Procedure V, crash hazard shock test=75g

### Standards/Certifications

- ♦ CE/FCC class B/E13

## Ordering Information

- ♦ **VMC 1110-PR01 (P/N: 10VC0111003X0)**  
7" all-in-one vehicle computer with touch screen, and Intel Atom® dual core x7211RE Processor 1.0GHz with 8GB DDR5, 128GB eMMC