VMC 3030

10.1" Rugged Vehicle Mount Computer with Intel Atom® x7433RE Processor, Projected Capacitive Touch Screen





Main Features

- 10.1" TFT LCD monitor with projected capacitive touch screen
- Wide viewing angle with high resolution 1280 x 800
- Touch panel cover thickness 3mm for IK08 protection
- 1,000nits brightness with sunlight readable capability
- Built-in Intel Atom[®] x7433RE processor, 4-core
- HDMI output for 2nd display
- On screen F1 ~ F5 programmable function keys
- Wide range DC input 9V ~ 60V
- Front panel IP65 rating
- Optional back-up battery available

Product Overview

VMC 3030, 10.1-inch all in one robust vehicle mount computer, is designed for the warehouses, port, logistic and material handling markets. It implements the Intel Atom® x7433RE processor on both of Windows and Linux platforms, and offers front panel IP65 and IK08. LCD panel: 1,000nits typ. guarantees to reach sunlight-readable. Wide-range power input (9V~60V) can let VMC 3030 to be capable of setting up in various facilities and vehicles. The M.2 slot x 2 and mPCIe slot x 1 are designed for WWAN and WLAN wireless connectivity.

Specifications

LCD Panel

- 10.1-inch TFT LCD panel with LED backlight
- 1280 x 800 pixels
- Brightness: 1000 cd/m² (typical)
- Viewing angle: 170° (H)/170°(V)
- Contrast ratio: 800:1 (typical)

Touch Screen

- Projected capacitive
- Anti-glare coating surface
- Transmission rate: 86 ± 3%

CPU

Intel Atom[®] processor x7433RE, 1.5GHz, 9W, 4 core

Memory

• 1 x 262-pin DDR5 SO-DIMM socket support 4800MHz up to 16GB • Default 4800MHz, 8GB

Video Output

• 1 x HDMI 2.1 up to 4096 x 2160@60Hz

Storage

- 1 x M.2 2280 Key M for SATA 3.0
- 1 x mSATA (occupied mini-PCIe slot)
- 1 x Micro SDXC Slot (BOM optional)

Expansion

- 1 x Full size mini-PCIe socket (USB 2.0, PCIe 3.0/SATA 3.0)
- 1 x M.2 2230 Key E socket (USB 2.0, PCIe 3.0 x2), BOM optional M.2

• 1 x M.2 3042/3050/3052 Key B socket (USB 2.0, USB 3.2 Gen2) for

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 gvroscope

LAN

- + 1-Port LAN, 10/100/1000/2500 Mbps, M12 X-coded

- 1 x Light sensor
- 4 x LED indicators (1 x power, 3 x programmable)
- 2 x Built-in 2W speakers
- 1 x Mic

I/O Interface-Lateral

- Right side
 - 1 x Power button
 - 1 x USB 2.0 type A connector w/ cover
 - 1 x System reset button w/ cover
 - 1 x MicroSD slot w/ cover (BOM optional)
 - 1 x Dual Nano-SIM slot w/ cover

2230 Key E socket (USB 2.0, PCIe 3.0, PCIe 3.0)

LTE/5G NR module with 1 x external dual Nano-SIM slot

Security

• TPM 2.0: Infineon SLB9670VQ2.0

I/O Interface-Front

• F1 ~ F5 programmable function keys (or volume control keys (+/-), brightness control keys (+/-), volume mute)



Dimension Drawing 54.0 0.0.010 ō • 0 ō •(***)• 227.5 0 Ô 294.0

I/O Interface-Rear

- 2 x DB9 (COM1/2) for full RS232/422/485
- 1 x Power connector, M12 A-coded 5-pin
- 1 x 10/100/1000/2500 Mbps LAN, M12 X-coded 8-pin
- 2 x USB 3.2 Gen1 type A
- 1 x HDMI output
- 1 x DB9 female (audio) for Mic-in (stereo), 1 x Line-out (stereo)
- 1 x DB15 (multi port)
 - 2 x GPI
 - 2 x GPO
 - 1 x Isolated CAN FD, compatible with CAN2.0A/2.0B
 - PWM (speed)+Direction+GND
- 4 x SMA connector hole for WWAN
- 2 x RP-SMA connector hole for WLAN
- 1 x RP-SMA connector hole for Bluetooth
- 1 x SMA connector for GNSS

Mechanical

- Cooling system: fanless
- Enclosure: metal
- IK rating: IK08 (housing and touch screen)
- Mounting: VESA 75/100
- Ingress protection: front panel IP65
- Dimension: 294.0mm (W) x 227.5mm (H) x 54.0mm (D)
- Weight: 4.5kg

Power Management

- 9V ~ 60V DC in
- Reverse protection/over voltage protection/under voltage protection
- Ignition on/off control & programmable on/off delay timing
- Wake up by SMS, RTC, LAN and ignition

Environment

- Operating temperatures: Ambient with air -30°C to 60°C, ambient with air
- Storage temperatures: -40°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)

- Vibration (random)
 - 2g@5~500 Hz (in operation)
- Vibration
 - Operating: MIL-STD-810H, 514.8 Procedure 1, Category 4
 - Storage: MIL-STD-810H, 514.8E Procedure 1, Category 24
 - IEC 60068-2-6: Sinusoidal 5~500MHz 2G
- Shock
 - Operating: MIL-STD-810H, Method 516.8, Procedure I, trucks and semi-trailers = 40g
 - Crash hazard: MIL-STD-810H, Method 516.8, Procedure V, ground equipment = 75g
- IEC 60068-2-27
- Operating: half sine, 20G 11ms Non-operating: half sine, 50G 11ms

Operating System

- Windows 10/11
- Linux

Standards/Certifications

CE/FCC class B/E13

Ordering Information

- VMC 3030-AC0 (P/N: 10VC0303000X0)
 10.1" rugged vehicle mount computer with Intel Atom® processor x7433RE, projected capacitive touch screen and font panel IP65, 8GB DDR5 SO-DIMM, DC input 9~60 VDC
- (Optional) VMC3030 battery kit (P/N: 88VC0303000X0) Back-up battery for approx. 30 minutes of operation under power consumption 20W