VMC 3021

Main Features

- 10.4" XGA TFT LCD monitor with 5-wire resistive touch
- Built-in Intel Atom® x7-E3950 processor, 1.6GHz
- Aluminum die-casting and fanless design
- Analog camera x 3 (CVBS)
- Complete IP65 housing
- Automatic/manual brightness control
- Isolated CANBus 2.0 x 2
- 10/100/1000Mhz for independent ethernet x 2
- On screen F1 ~ F10 programmable function keys

- Military standard for vibration and shock
- PoE 802.3af/at (optional)
- iButton and RFID for ID identification
- Micro SIM x 2
- Wide range DC input from 9V ~ 60V DC in
- Sunlight readable capability: 1,200nits LCD brightness
- One expansion port reserved
- Operating system: Windows and Linux
- CE/FCC/E-Mark

Product Overview

VMC 3021, 10.4-inch all in one robust vehicle mount computer, is designed for the warehouses, port, logistic and material handling markets. It implements the latest Intel Atom® x7-E3950 processor (codename Apollo Lake) on both of Windows and Linux platforms, and offers complete IP65. VMC 3021 is able to support analog camera x 3 for security purpose and takes less than 1 second to see video content. PoE 802.3af/at for IP camera is another choice. LCD panel: 1,200nits typ. guarantees to reach sunlight-readable. Wide-range power input (9V~60V) can let VMC3021 to be capable of setting up in various facilities and vehicles. The design of mini-PCIe slots x 4 and one expansion slot can solve the potential request from the market when needed.

Specifications

LCD Panel
- 10.4-inch TFT LCD panel with LED backlight
- 1024 x 768 pixels (XGA)
- Brightness: 1200 cd/m² (typical)
- Viewing angle: 170° (H):170°(V)
- Contrast ratio: 900:1 (typical)

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

CPU & Chipset
- Intel Atom® x7-3950 processor dual core 1.6GHz memory
- One 204-pin DDR3L 1600MHz SO-DIMM slot (default: 4GB)

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

Expansion
- 3 x Full size mini-PCIe socket (USB 2.0, PCIe 2.0)
- 1 x Full size mini-PCIe socket (USB 2.0) for LTE module with 2 x internal Micro-SIM
- 1 x CFast

I/O Interface-Front
- LCD back light on/off
- Volume control (+/-)
- Brightness control (+/-)
- Light sensor
- 4 x LED indicators (power, WLAN, shift, storage)
- F1 ~ F10 programmable function
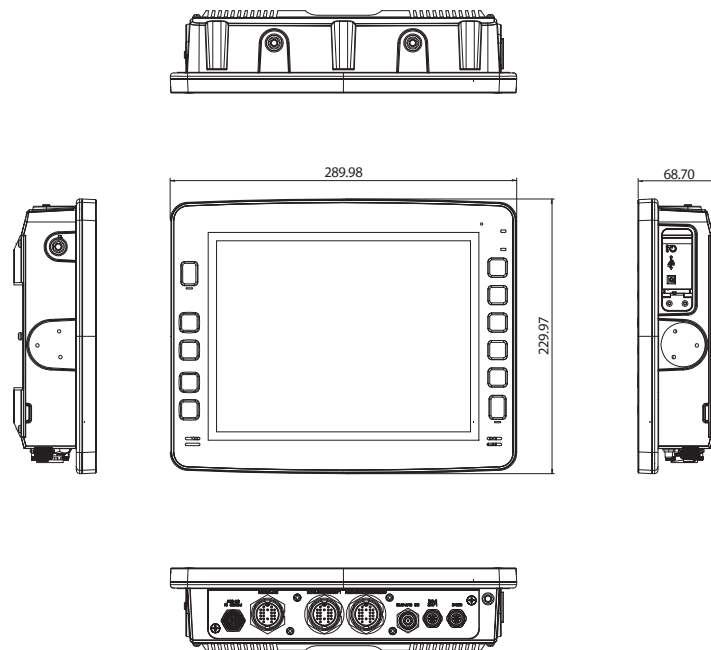- 2 x Built-in 2W speakers

I/O Interface-Lateral
- Right Side
  - 1 x CFast card slot
  - 1 x System reset button
  - 1 x USB 2.0 host type A connector
- Left Side
  - 1 x Antenna for WWAN

I/O Interface-Bottom
- 1 x M12 (22-pin)
  - 1 x 10/100/1000, LAN1 (wake up on LAN)
  - 1 x RS232 (Tx/Rx)/RS422/RS485 (RI, 5V/0.5A, 12V/0.5A)
  - 1 x DR (odometer + speed)
  - 2 x GPI
    Source: 9V ~ 60V-in (default)
    Sink: external 0V ~ 60VDC pull-high selected by software settings
        Input High "1" Voltage: 3.3 ~ 60 VDC
        Input Low "0" Voltage: 0 ~ 2 VDC

Dimension Drawing

289.98

229.97

68.70

- 2 x GPO
  Source: 9V ~ 60V-in (default)
           12V/6mA, 24V/12mA, 36V/18mA, 48V/24mA, 60V/30mA
  Sink: external max. 0.5A pull high
- 1 x M12 (21-pin)
  - 1 x Mic-in
  - 1 x Line-out
  - 1 x Full RS232/422/485 (RI, 5V/0.5A, 12V/05A)
  - 2 x Isolated CANBus 2.0B
    When installing CAN06, CAN2 becomes J1939/ISO 15765-4
    When installing CAN05, CAN2 becomes J1708
  - 1 x iButton
- 1 x M12 (5-pin)
  - 9V ~ 60V DC in
- 1 x M12 (8-pin)
  - Either of DC output or RFID
    1 x DC output (12V/2A)
    1 x RFID (Tx/Rx, 12V/2A)
- 1 x M12 (8-pin)
  - 1 x 10/100/1000, LAN2 (optional for PoE 802.3af/at)
- 1 x M12 (8-pin)
  - 2 x USB type A
- 1 x M12 (18-pin)
  - Expansion port
- 1 x GPS antenna SMA connector (on housing)

I/O Interface-Top
- 2 x Antenna for Wi-Fi

Mechanical
- Cooling system: fanless
- Enclosure: aluminum die castig
- Mounting: VESA 75
- Ingress protection: complete IP65
- Dimension: 289.98mm (W) x 229.97mm (H) x 68.70mm (D)
- Weight: 3.5kg, 7.7lb

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 LAN1, SMS, RTC and ignition

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
  - 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 = 40g
  - Crash hazard: MIL-STD-810G, Method 516.6, Procedure V, ground equipment = 75g

Operating System
- Windows 10, Linux

Standards/Certifications
- CE/FCC class B/E13

Ordering Information

- **VMC 3021-4A11 (P/N: 10VC0302101X0)**
  10.4" rugged vehicle mount computer with Intel Atom® x7-E3950, touch screen and complete IP65

NEXCOM

Vehicle Mount Computer

We reserve the right to change specifications and product descriptions at any time without prior notice.

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