VMC 3020

10.4" Rugged Vehicle Mount Computer
with Intel® Atom™ x5-E3930 processor, Touchscreen and IP65



Main Features

- 10.4" XGA TFT LCD monitor
- Aluminum die-casting and fanless design
- Built-in Intel® Atom™ x5-E3930 processor, 1.8GHz
- Automatic/manual brightness control
- Heater supported
- On screen F1 ~ F10 programmable function keys
- 5V/12V power supply for accessaries
- Military standard for vibration and shock
- UPS Battery supported
- iButton and RFID for ID identification
- Wide range DC input from 9V~60V DC in
- Sunlight readable capability: 1,200nits LCD brightness

Product Overview

VMC 3020, 10.4-inch all in one robust vehicle mount computer, is designed for the warehouses, logistic and material handling market. It implements the latest Intel® Atom™ x5-E3930 processor (codename Apollo Lake) and can work on Windows and Linux for different OS. markets. To work well in the special warehouse application, VMC 3020 specially designs powered I/O (up to 12V DC out) to power on printer, scanner… Besides, heater inside VMC 3020 can help forklift resume to work quickly when it stays in snow for a long time. Battery can assist system without stopping working if power suddenly drops down. 1,200 nits brightness is for sunlight readable purpose.

Specifications

LCD Panel

- 10.4-inch TFT LCD panel with LED backlight
- 1024 x 768 pixels (XGA)
- Brightness: 1200 cd/m² (typical)
- Viewing angle: 140° (H):120°(V)
- Contrast ratio: 500:1 (typical)

Touch Screen Sensor

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

CPU & Chipset

- Intel® Atom™ x5-E3930 processor dual core 1.8GHz

Memory

- One 204-pin DDR3L 1600MHz SO-DIMM slot (Default: 4GB)

Expandable Storage

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

Expansion

- 1 x half-size mini-PCIe socket (PCIe + USB) for WLAN option
- 1 x full-size mini-PCIe socket (USB) x 1 for WWAN option
- 1 x M.2 key-E (PCIe + SDIO + UART + USB) for WLAN option
- 1 x SIM slot

I/O Interface-Front

- 5 x on screen display buttons
  Power on/off
  Volume control (+/-)
  Brightness control (+/-)
- Light sensor
- 4 x LED indicators (power/battery charging, WLAN, shift, storage)
- F1 ~ F10 programmable function keys
- 2 x Built-in 2W speakers

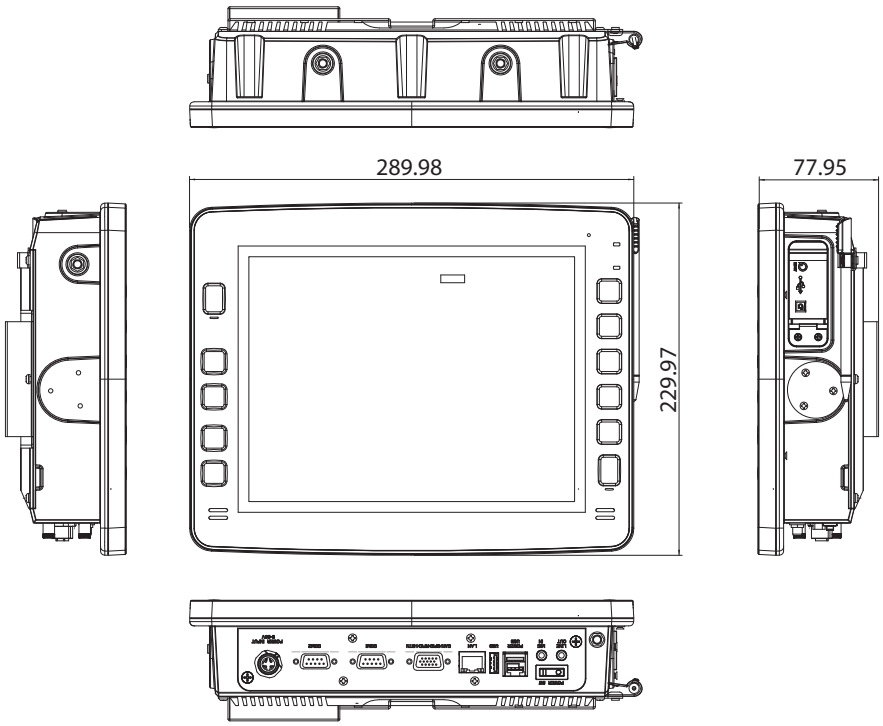
I/O Interface-Lateral

- Right Side:
  1 x CFast card slot
  System reset button
  USB 2.0 host type A connector
- Left Side:
  1 x antenna for WWAN

I/O Interface-Bottom

- 1 x Power Switch (ATX mode)
- Lockable power connector (power, ignition, ground)
- 2 x RS232 (full signals, RI, 0V, 5V/1.5A, 12V/1.5A)
- 1 x DB15
  - 1 x Isolated CAN 2.0B
  - 1 x iButton

Dimension Drawing



- 1 x RFID (12V/1A. 5V/1A, 4pin)
- 1 x Optional RS232 Tx/Rx (share with GPS UART)
- 2 x GPI
  Sink type: 5VDC TTL (default)
  Source type: 3 ~ 28VDC
- 2 x GPO
  Sink type: 5VDC TTL (default), max current: 20mA
  Source type: 3 ~ 28VDC, max current: 150mA

- 1 x Powered USB (5V/1.5A, 12V/1.5A)
- 1 x USB Type A (5V/1A)
- 1 x Mic-in, 1 x Line-out
- 1 x Antenna for GPS

I/O Interface-Top

- 2 x Antenna for Wi-Fi

Mechanical

- Cooling system: Fanless
- Enclosure: Aluminum die castig
  Mounting: VESA 75/100 & desktop mounting
- Ingress protection: front panel IP65
- Dimension: 289.98mm (W) x 229.97mm (H) x 77.95mm (D), including battery
- Weight: 3kg, 6.61lb

Power Management

- 9V~60V DC in (UPS: 12V, 24V, 36V and 48V)
- Reverse protection/over voltage protection/under voltage protection
- Ignition On/Off control & programmable On/Off delay timing
- Wake up by SMS, RTC and ignition

Operating System

- Windows 10
- Linux: YOCTO (by request)

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= 20g
  Crash hazard: MIL-STD-810G, Method 516.6, Procedure V, ground equipment= 75g

Standards/Certifications

- CE/FCC class B/E13

Ordering Information

- **VMC 3020 (P/N: 10VC0320000X0)**
  10.4" Rugged Vehicle Mount Computer with Atom™ x5-E3930, Touch Screen and Front IP65 w/o Heater

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