

# Thor VM3

## Vehicle-Mounted Computer

Designed for use in the toughest distribution center environments, manufacturing facilities and freight operations, the Honeywell Thor™ VM3 is the industry's most capable full-size vehicle-mounted computer, delivering unmatched operational efficiencies. The Thor VM3 computer offers breakthrough features designed to eliminate downtime and maximize capital investment. The Smart Dock feature delivers immediate savings on support and maintenance costs while maximizing efficiency by enabling users to dynamically shift computers as vehicles fail or workloads change. The field-replaceable front panel allows enterprises to minimize investments in spare parts by substituting spare front panels for spare computers, and saves valuable time and maintenance costs by leveraging in-house support staff to service the most common breaking point. With the Thor VM3 computer, you gain the compatibility you need to upgrade to next-generation Microsoft® Windows® operating systems and the power to take advantage of the latest security and productivity-enhancing features and functionality. The Thor VM3 computer supports multiple Windows-based operating systems, so integration and application development are simple as business needs grow. For enterprises currently running on the Windows CE operating system, the Thor VM3 computer offers easy implementation and deployment into existing and future IT infrastructures. With memory expandable up to 4 GB RAM and 64 GB solid-state disk, the Thor VM3 computer can run powerful programs and applications to maximize efficiencies in activities such as case picking, truck loading, putaway and replenishment - giving workers real-time access to information anywhere it is needed.

Whether indoors, outdoors, in a warehouse, on a shop floor or in intermodal facilities, the Thor VM3 computer enables enterprises to choose the options needed to maximize efficiencies in the most demanding environments. The Thor VM3 computer supports standard resistive touchscreen or optional capacitive touchscreen for multi-touch applications. A WWAN radio option enables use in expansive outdoor operations where a Wi-Fi network can't be deployed. The Thor VM3 computer is built to withstand extreme temperatures and supports an optional screen defroster for cold storage and freezer environments and a brighter outdoor display for outdoor applications. An optional screen blanking feature restricts driver access to the screen when the vehicle is in motion to comply with the highest safety standards.



*The Thor VM3 full-size vehicle-mounted computer delivers unmatched operational efficiencies in the toughest distribution center environments.*

## FEATURES & BENEFITS



Smart Dock feature enables mounting and removal in seconds, saving on support and maintenance costs while maximizing efficiency by allowing dynamic shifting of computers as workloads change..



A user field-replaceable front panel reduces maintenance costs by allowing users to service the most wear- and abuse-prone components themselves rather than returning them to the repair depot.



Built-in ignition control eliminates the maintenance expense and lost productivity caused by a dead vehicle battery.



The Intel® x86 architecture and Dual Core 1.5 GHz processor enable superior performance in data-intensive applications.



With support for multiple versions of Windows (including Windows CE), the Thor VM3 easily integrates into existing IT infrastructures while enabling an upgrade path for the future.

# Thor VM3 Technical Specifications

## MECHANICAL

**Dimensions:** Computer: 318 x 260 x 62 mm (12.5 x 10.3 x 2.4 in); Dock: 180 x 155 x 54 mm (7.1 x 6.1 x 2.1 in); Assembled Depth: 104 mm (4.1 in)

**Weight:** Computer: 3.0 kg (6.65 lbs); Standard Dock: 1.5 kg (3.2 lbs); Enhanced Dock: 1.1 kg (2.4 lbs) Dock weights include mounting ball.

**Operating Temperature:** -30°C to +50°C (-22°F to +122°F)

**Storage Temperature:** -30°C to +50°C (-22°F to +122°F)

**Humidity:** 5% to 95% non-condensing

**Environmental Sealing:** Independently certified to meet IP66 standards for moisture and particle resistance

**ESD:** EN 55024:2010 (enhanced ESD to 8kV direct and 15kV air)

**Vibration:** MIL-STD-810F, composite wheeled vehicles

**Shock:** SAE-J1455 (MIL-STD-810g-4.6.6 Procedure V-Crash Hazard Shock Test)

## SYSTEM ARCHITECTURE

**Processor:** 1.5 GHz Dual Core Intel Atom E3826

**Operating System:** Microsoft Windows Embedded Compact 7 (WEC 7), Microsoft Windows Embedded Standard 7 (WES 7), Microsoft Windows 7 (Win 7), Microsoft Windows 10 IoT Enterprise (Win 10 Industry)

**Memory:** 4 GB DDR3 System Software: Data Collection Engine for support of external scanners, Bluetooth® wireless technology configuration utilities, Microsoft Internet Explorer, Microsoft on-screen keyboard, Configuration Cloning Utility, Screen Blanking, Zoom Zone, Launcher

**Optional Software:** RFTerm and ETE Terminal Emulators, Enterprise Browser, SOTI device management

**Mass Storage:** WEC 7: 2 GB

**WES 7:** 64 GB, optional 4 GB industrial mSATA secondary SSD

**Win 7:** 64 GB, optional 4 GB industrial mSATA secondary SSD

**Win 10 Industry:** 64 GB, optional 4 GB industrial mSATA secondary SSD

**Graphics Processor:** Intel HD Graphics Base Frequency 533 MHz, Burst Frequency 667 MHz

**Power Supply & UPS:** 10 to 60 VDC isolated, optional external converters for AC (90–240 VAC) and extended range DC (60–150 VDC); integrated Li-Ion maintenance UPS with 30-min life at -30°C (-22°F)

**Display:** Indoor: 307 mm (12.1 in) XGA (1024 x 768) LED backlit display, 400 NIT, optional screen blanking

**Outdoor:** 307 mm (12.1 in) XGA (1024 x 768) LED backlit display, 900 NIT, optional screen blanking

**Touch Panel:** Standard: Industrial touch panel with resistive touch and support for finger touch and standard stylus

**Multitouch:** Optional industrial touch panel with Projected Capacitance touch for finger and conductive stylus; hardened glass overlay

**Cold Storage:** Optional industrial resistive touchscreen with integrated defroster

**Integrated Keypad:** Seven programmable multi-function keys

**Audio:** Audio for headset, integrated stereo speakers with adjustable volume control, integrated microphone

**Enhanced Dock:** 2x powered RS-232 COM ports, 1x USB 2.0 powered host port Type A, 3 additional USB 2.0 powered host ports, 1x USB 2.0 Client port, 1x Ethernet RJ45 port, 1x CAN-bus port, 1x headset port, DC power input and ignition control input.

**Standard Dock:** 2x powered RS-232 COM ports, 1x USB 2.0 powered host port, 1x USB 2.0 Client port, 1x CAN-bus port, 1x headset port, DC power input and ignition control input.

**Computer:** RF Antenna ports for Wi-Fi (2), optional RF ports for WWAN (2) and GPS (1)

**Storage Expansion:** User-installable expansion slot supports 4 GB mSATA card

**Development Environment:** Honeywell SDK available for Windows Embedded Compact 7

**Warranty:** One-year factory warranty

**Service Plans:** Optional three- and five-year service programs offer worry-free mobile computing

## WIRELESS CONNECTIVITY

**WWAN:** Optional software-definable (data only)

**4G radio:** LTE/UMTS/HSPA+/GSM/GPRS/EDGE/EV-DO Rev A/1xRTT with data speeds up to 100 Mbps downlink and 50 Mbps uplink

**WLAN:** 802.11 a/b/g/n Wi-Fi certified, CCX certified for data

**WLAN Security:** Authentication: Support for a full range of 802.1X (EAP) types, including EAP-TLS, PEAP-MSCHAPv2, PEAP-GTC, LEAP and EAP Fast Encryption; support for static, pre-shared, and dynamic encryption keys, 40-bit and 128-bit keys, WEP, WPA (TKIP), and WPA2 (AES) Encryption Methods

**WLAN Antennas:** Dual internal antennas, dual external remote and direct connect antenna accessories

**WPAN:** WEC 7, WES 7, Win 7: Bluetooth 2.0+EDR standard, internal antenna

**Win 10 Industry:** Bluetooth 4.0 standard, internal antenna

**GPS:** Integrated Assisted GPS (A-GPS) with fast position acquisition and low power consumption; included with WWAN radio

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