

# Thor VM2

## Vehicle-Mount Computer

Solidifying Honeywell's position as the leader in vehicle-mount computing, the Thor VM2 builds on the best-in-class Thor VM1 that was created specifically to address the unique challenges of supply chain applications.

Ideally suitable for warehouse, port and yard process automation, the Thor VM2 introduces an additional form factor option granting greater flexibility which is emphasized by its 9.7" XGA display, programmable multi-function keys, and WLAN and WWAN connectivity. Available with both Microsoft Windows CE 6.0 and Windows Embedded Standard 2009 operating systems and compatible with many industry standard terminal emulation and web browser applications including the popular Honeywell RFTerm™ TE, the Thor VM2 is built for simple and easy application development and system integration.

Comparatively equipped to reduce operator downtime and capital investment, the Thor VM2 leverages the same platform and innovative features as the well-known Thor VM1 vehicle-mount computer. Delivering laptop-like simplicity, the Smart Dock capability allows for the separation of the computer from the power supply empowering users to seamlessly migrate from vehicle to vehicle and reducing the required number of computers. Further, the field-replaceable front panel enables single-tool touch screen repairs, which significantly minimizes downtime and maintenance costs resulting from wear and tear at the most common breaking point. Lastly, the power management settings that accompany the ignition control feature virtually eliminate dead vehicle batteries and the subsequent productivity losses.

Most supply chain models encompass many different activities, resources and functions and each stage in the process demands consistency and the ability to respond, real-time, to issues as they occur. To that end, the Thor VM2 vehicle-mount computer offers businesses a comprehensive route to dramatic operational improvements.



## Features

- **Smart Dock:** Enables mounting and removal in seconds like a laptop dock but with the ruggedness and sealing required for industrial applications; maximizes efficiency by dynamically shifting workers and computers as the workload changes, while minimizing maintenance cost by enabling a computer to be shifted from one vehicle to another in 1/6 the standard time
- **Field-Replaceable Front Panel:** Reduces capital and maintenance cost by integrating the two most wear and abuse prone components, the keyboard and touchscreen, into a user-replaceable part; reduces capital costs by substituting spare front panels for spare computers
- **Ignition Control:** Eliminates the maintenance expense and lost productivity caused by a dead vehicle battery; unit can be configured to automatically go into standby or hibernate at a selectable time after the ignition switch is turned off, saving time for associates while eliminating a point of concern for warehouse management

# Thor VM2 Technical Specifications

## Mechanical

<b>Dimensions</b>	Computer: 10.6" x 8.4" x 2.1 (268 x 214 x 53); Dock: 7.1" x 6.1" x 2.5" (180 x155 x 64mm)
<b>Weight</b>	Computer: 4.8 lb (2.2 kg); Dock: 3.2 lb (1.2 kg)
<b>Operating Temperature</b>	-22°to +122°F (-30° to +50°C)
<b>Storage Temperature</b>	-22° to +140°F (-30° to +60°C)
<b>Humidity</b>	5% to 95% non-condensing
<b>Environmental Sealing</b>	Independently certified to meet IP66 standards for moisture and particle resistance
<b>ESD</b>	EN 55024:1998 (enhanced ESD to 8kV direct & 15kV air)
<b>Vibration</b>	MIL-STD-810F, composite wheeled vehicles
<b>Shock</b>	SAE-J1455

## System Architecture

<b>Processor</b>	Intel® Atom Z530 1.6GHz
<b>Operating System</b>	Microsoft® Windows® CE 6.0, Microsoft® Windows® Embedded Standard 2009 (WES 2009)
<b>Memory</b>	1GB for Microsoft® Windows® CE or 2GB for WES DDR2 SDRAM
<b>System Software</b>	Microsoft® Windows® CE 6.0: DCWedge barcode wedge; WES: Freefloat Link*One wedge
<b>Optional Software</b>	Microsoft® Windows® CE 6.0: RFTerm, Wavelink TE, Naurtech CETerm & Industrial Browser, and Stay-Linked Terminal Emulators Wavelink Avalanche & eXpressConfig network management; WES: Freefloat Access*One terminal emulator
<b>Mass Storage</b>	1GB for Microsoft® Windows® CE; 4GB, 8GB for Microsoft® WES operating system
<b>Graphics Processor</b>	Intel® GMA 500
<b>Power Supply &amp; UPS</b>	10 to 60 VDC isolated, Optional external converters for AC (90-240VAC) & extended range DC (60-150 VDC); Integrated Li-ION maintenance UPS with 30-min life at -20°C
<b>Display</b>	9.7" (246 mm) XGA (1024x768) LED backlit display, 400 NIT, Optional screen blanking
<b>Touch Panel</b>	Industrial touch panel with resistive touch and support for finger touch and stylus
<b>Keyboard</b>	Five programmable multi-function keys
<b>Audio</b>	Audio for headset, Integrated stereo speakers w/ adjustable volume control, Integrated microphone
<b>I/O Ports</b>	1x USB 2.0 host port, 1x USB 1.1 client port, 2x RS-232 COM ports, 1x CAN-bus port, 1x Headset port, DC power input & ignition control input, RF Antenna ports for WiFi (2), WWAN (1) & GPS (1)
<b>Storage Expansion</b>	User installable expansion slot supports 1GB and 4GB SD card
<b>Development Environment</b>	SDK available for Windows® CE 6.0; Standard Windows® SDK for WES 2009
<b>Warranty</b>	1 year factory warranty
<b>Service Plans</b>	Optional one-, three- and five-year service programs offer worry-free mobile computing

## Wireless Connectivity

<b>WWAN</b>	Software definable (data only) 3.75G radio with five-band UMTS/HSPA+ (800/850/900/1900/2100MHz), quadband GSM/GPRS/EDGE (850/900/1800/1900MHz) and dual-band EV-DO/CDMA (800/1900)
<b>WLAN</b>	802.11 a/b/g for Windows CE, 802.11 a/b/g/n for WES 2009, Wi-Fi™ – certified, CCX certified for data
<b>WLAN Security</b>	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
<b>WLAN Antennas</b>	Dual internal antennas, dual external remote and direct connect antenna accessories
<b>WPAN</b>	Bluetooth® 2.0+EDR standard, internal antenna
<b>GPS</b>	Integrated Assisted GPS (A-GPS) with fast position acquisition and low power consumption

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Thor VM2 DS Rev A 01/13  
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