

# Thor VM1A

## Vehicle-Mount Computer

Forklifts and vehicle-mount computers are essential tools in the day-to-day workflows of warehouses, manufacturing, ports, and intermodal environments. You need to keep moving products and materials in and out all day long, without compromise, and without worrying that your vehicle-mount computer won't be able to keep up with your workforce or your IT infrastructure. You need the Thor™ VM1A.

Built with many of the same easy-to-use, easy-to-maintain features of the popular Thor VM1 and CV41 models, the rugged, Android™-based Thor VM1A also offers all the advantages of Honeywell's Mobility Edge™ platform – including the ability to accelerate provisioning, application certification, and deployment across the enterprise. The Thor VM1A is upgradable from Android O to Android R, and features extended security update support to maximize return on customer investment and provide a lower overall TCO. The device's advanced enterprise configuration and software support tools also simplify frequently repeated tasks such as unit setup and distribution of security and software updates.

Compact, ergonomic, and powerful, the Thor VM1A has numerous breakthrough features designed to maximize productivity, minimize visual obstructions, and reduce or eliminate downtime. The powerful Qualcomm 660 processor, integrated keyboard, and 2x2 MIMO WLAN communications keep workers connected and productive. Built to withstand extreme temperatures, the device's large 8-inch display, readable both indoors and outdoors, supports both resistive and capacitive touchscreen options, and is available with an optional screen defroster for use in cold storage and freezer environments.

The Smart Dock feature delivers immediate savings on support and maintenance costs while maximizing efficiency, enabling users to quickly



*Built on the future-proof Mobility Edge platform, the Android-based Thor VM1A vehicle-mount computer is built tough to handle harsh warehouses, ports, and intermodal and manufacturing environments.*

shift computers as vehicles fail or workloads change. The field-replaceable front panel allows enterprises to minimize investments in spare parts by substituting low-cost spare front panels for spare computers, and saves valuable time and maintenance costs by leveraging in-house staff to service touchscreen or keyboard failures.

## FEATURES & BENEFITS



The Smart Dock feature enables mounting and removal in seconds without touching cabling, saving on support and maintenance costs while minimizing capital expense by allowing the shifting of computers between vehicles as workloads change.



The field-replaceable front panel reduces maintenance costs by enabling on-site unskilled personnel to service the most wear- and abuse-prone components themselves rather than returning them to the repair depot.



Security update availability is just as important as computer durability for maximizing a computer's useful life. Mobility Edge products provide five more years of security updates than a typical Android device.



No need to choose between optimizing productivity and minimizing IT support costs. All Honeywell Mobility Edge computers share a common hardware and software platform. From an IT perspective, they are all the same product.



The Mobility Edge hardware platform and enterprise lifecycle tools drive an integrated, repeatable, scalable approach for accelerated and secure development, deployment, performance, and lifecycle management.

# Thor VM1A Technical Specifications

## SYSTEM ARCHITECTURE

**Processor:** 2.2 GHz Qualcomm® Snapdragon™ 660 octa-core

**Operating System:** Android 8 (Oreo), upgradable through Android R

**Memory:** 4 GB RAM, 32 GB Flash

**Storage Expansion:** User-accessible microSD card up to 512 GB (SDXC/SDHC-compliant)

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

### Input/Output:

**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:** 2x SMA connectors for external WLAN antennas

**Sensors:** Ambient light sensor, accelerometer, gyroscope, magnetometer

**Display:** 20 cm (8 in) WXGA (1080 x 768) LED backlit display, standard 400 NIT indoor display, optional 900 NIT outdoor display, optional screen blanking

### Touch Panel:

**Resistive:** Industrial touch panel with support for finger touch and standard stylus; supports swipe

**Capacitive:** PCAP multi-touch touch panel for finger and conductive stylus; hardened glass overlay. Automatic detection and configuration utilizing mutual and self-capacitance modes for water rejection and use with many off-the-shelf gloves

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

**Keypad:** Full 64-key QWERTY keyboard with number pad and 10/20 function keys; all keys, except modifiers, are mappable; all keys backlit; key labels support ANSI and 5250 emulation

**Power Supply and UPS:** 10 to 60V DC isolated, optional external converters for AC (90 to 240V AC) and extended range DC (60 to 150V DC); integrated Li-Ion maintenance UPS with 30-min life at 20°C (68°F), charging range 0°C to +35°C (32°F to +95°F)

## ACCESSORIES

Compatible with the VM series of accessories

## MECHANICAL

### Dimensions (L x W x H):

**Computer:** 268 mm x 214 mm x 43 mm (10.6 in x 8.4 in x 1.7 in)

**Weight:** 2.1 kg (5.6 lb)

**Dock:** 180 mm x 155 mm x 64 mm (7.1 in x 6.1 in x 2.5 in)

**Weight:** 1.2 kg (3.2 lb)

## ENVIRONMENTAL

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

**Storage Temperature:** -30°C to 70°C (-22°F to 158°F)

**Humidity:** 5% to 95% relative humidity (non-condensing)

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

**Shock:** SAE-J1455

**ESD:** EN55024:1998 (enhanced ESD to 8 kV direct and 15 kV air)

**Environmental Sealing:** Independently certified to meet IP66 standard for moisture and particle intrusion

## WIRELESS CONNECTIVITY

**WLAN:** IEEE 802.11 a/b/g/n/ac; 2x2 MIMO, Wi-Fi Alliance certified

**Additional WLAN Features:** 802.11d/e/f/g/h/i/j/k/m/ma/REVma/mb/REVmb/REVmc/p/r/s/t/v/u/w/y/z/aa/ac/ad/ae/af/ah/ai/aj/ak/aq/ax/802.11.1/802.11.2

**WLAN Security:** OPEN, WEP, WPA/WPA2 (Personal and Enterprise)

**Supported EAP:** TLS, PEAP, TTLS, PWD, FAST, LEAP CCX Version 4 compliant

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

**Bluetooth®:** Class 1.5 V5.0 Bluetooth and BLE

**Bluetooth Profiles:** HFP, PBAP, A2DP, AVRCP, OPP, SPP, GATT

**NFC:** Integrated Near Field Communication

## SOFTWARE

Honeywell Power Tools and Demos. Terminal Emulator. Enterprise Browser. Application Launcher and Lockdown Provisioning Tools. Honeywell Mobility SDKs for Android, Web, and Xamarin. Support for Third-Party MDM Solutions

## WARRANTY

One-year factory warranty

## SERVICE PLANS

Optional service programs offer worry-free mobile computing

For a complete listing of all compliance approvals and certifications, please visit [www.honeywellaidc.com/compliance](http://www.honeywellaidc.com/compliance).

For a complete listing of all supported barcode symbologies, please visit [www.honeywellaidc.com/symbologies](http://www.honeywellaidc.com/symbologies).

Thor and Mobility Edge are trademarks or registered trademarks of Honeywell International Inc. in the United States and/or other countries.

Android is a trademark or registered trademark of Google Inc. in the United States and/or other countries.

Qualcomm and Snapdragon are trademarks or registered trademarks of Qualcomm Incorporated in the United States and/or other countries.

Bluetooth is a trademark or registered trademark of Bluetooth SG, Inc. in the United States and/or other countries.

All other trademarks are the property of their respective owners.

**carlton**  
TECHNOLOGIES INC.

### For more information, contact:

Carlton Technologies, Inc.  
2336 112th Ave  
Holland, MI, 49424  
877-595-2700  
sales@carltontechnologies.com  
www.carltontechnologies.com

Thor VM1A Data Sheet | Rev A | 09/18  
© 2018 Honeywell International Inc.

**Honeywell**