



*wi4 Mesh*

# VMM7300

Vehicle Mounted Modem • for 4.9GHz MOTOMESH Quattro

The VMM7300 turns any vehicle into a mobile office, offering secure and reliable wireless connectivity to a 4.9GHz MOTOMESH Quattro network.



**The Vehicle Mounted Modem (VMM) supports up to 6 Mbps burst data rates while moving at speeds in excess of 150 mph. A standard RJ-45 Ethernet port gives Mobile Data Terminals, IP video cameras, and other IP-ready devices access to the 4.9GHz MOTOMESH mobile broadband network. Motorola's Mobility Enabled Access (MEA) technology enables the VMM7300 to act as a wireless router/repeater, increasing network robustness and coverage at no additional cost.**

### Broadband Designed for Public Safety

The VMM7300 operates in the 4.9GHz band that is licensed exclusively for public safety use. This band is free from civilian interference and usage, maximizing the bandwidth and accessibility available to first responders. Designed for heavy duty use, this rugged and compact device is made to withstand the heat, shock and vibration of public safety vehicles.

For users and agencies not affiliated with public safety, Motorola offers the VMM6300, which operates in the unlicensed, 2.4GHz band. Both VMM versions offer the same, outstanding combination of throughput, mobility and connectivity that first responders need.

### Robust Data Rates for Mobile Broadband

The VMM7300 delivers up to 6 Mbps burst data rates on both the uplink and downlink for voice, video and data. Connectivity can be available for Internet, live streaming video, databases, telemetry, and other high bandwidth applications – even at speeds in excess of 150 mph.

### Position Location and Navigation Services

The Vehicle Mounted Modem offers position location capabilities without relying on costly Global Positioning Systems (GPS). Depending on network configuration, location determination can be quicker and more accurate than consumer GPS, and is available in places GPS is limited, such as parking garages and urban canyons. Motorola provides location data in a standard GPS format, allowing applications that operate with GPS data to interact seamlessly with the VMM7300.

### End-to-End Industry Standard IP Support

MOTOMESH supports end-to-end, standards based Internet Protocol (IP). Any IP based application or IP capable device will work seamlessly within a MOTOMESH network, including FIPS-140-2 compliant VPNs.

### Create Peer-to-Peer Networks Anywhere

Vehicles equipped with the VMM7300 can instantly form ad hoc, peer-to-peer, broadband networks with other 4.9GHz MEA enabled devices. A high-speed, broadband network will automatically form between authorized devices – even in places where there is no network infrastructure.

### Over-the-Air (OTA) Network Management

Every MOTOMESH device can be managed remotely using MeshManager software. End-to-end IP support enables IT managers to download and update client software – or add new features and services – wirelessly, greatly simplifying software maintenance procedures.

**MOTOwi<sup>4</sup>**

### A Total End-to-End Solution

Motorola's wireless broadband portfolio offers an array of access and backhaul technologies for complete end-to-end municipal wireless initiatives. Motorola wi4 Fixed Point-to-Multipoint and Point-to-Point solutions can provide reliable, high-capacity Internet backhaul links to Motorola mesh networks. MeshPlanner and MeshScanner enable detailed network planning and optimization capabilities. Additionally, Motorola's MOTOwi4 Ready Applications Ecosystem offers a wide range of validated solutions to generate immediate benefit from your wireless network.

## SPECIFICATION SHEET

MOTOMESH Quattro  
Four Radio Meshed WiFi Network  
with Mobility Enabled Access

### BENEFITS

- Best-in-class radio performance
- Reliable coverage
- Best-in-class throughput
- Robust security

### MOTOwi4

MOTOMESH Quattro is part of the MOTOwi4 family of broadband access technologies, a comprehensive platform of wireless broadband solutions, applications and services. Designed to complement and complete wireless networks, MOTOwi4 solutions address a broad range of applications across municipal, enterprise, and operator segments. The comprehensive MOTOwi4 portfolio creates a true end-to-end ecosystem of complementary products, services and solutions that provide high speed connectivity enabling a broad range of applications in fixed, nomadic, portable or mobile environments. Working together, wi4 Mesh solutions combined with other MOTOwi4 access technologies deliver ubiquitous, metro-wide (community-wide, campus-wide) wireless broadband coverage.

### WHY MOTOROLA

Motorola is uniquely positioned to address the wireless broadband market through the MOTOwi4 vision. Motorola has aligned its business units and roadmaps to provide a comprehensive, end-to-end solution covering all aspects of the broadband wireless access deployment. With our deep and extensive patent portfolio, over a decade of R&D investment, and our experience as a global supplier of broadband wireless access solutions, Motorola is primed to deliver its best in class wireless networks. Motorola is committed to leading the industry with end-to-end wi4 Mesh solutions addressing the full scope of the operator's deployment needs including access, core, devices, network management and services.

## MOTOMESH QUATTRO • VMM7300 RADIO CHARACTERISTICS

<b>Output Power</b>	24 dBm
<b>RF Modulation</b>	QDMA
<b>Operating Frequency (GHz)</b>	4.94 - 4.99
<b>Maximum Burst Data Rate</b>	6 Mbps
<b>Spectrum Used</b>	20MHz
<b>Antenna Type</b>	Omnidirectional, 7 dBi (magnetic mount antenna for vehicles)
<b>Antenna Connector</b>	N-Type

## NETWORK

<b>Network Management Software</b>	MeshManager EMS on Linux OS or Windows 2003 Server via SNMPv1, SNMPv2c or secure SNMPv3 • Web Interface via HTTPS (SSL) • 802.11 and MOTOMESH MIBs
<b>Network Interface</b>	Peer-to-Peer Multi-Hopping
<b>Configurable Network Devices</b>	3 assignable IP addresses - hub needed to connect more than one device

## SECURITY

<b>Virtual Private Network (VPN)</b>	Supports FIPS-140-2 encryption (Motorola Multi-Net Mobility)
<b>Authentication</b>	802.1X (Infrastructure/Client and Client/Client)

## POWER

<b>Power Requirements</b>	5-15 VDC
<b>Power Connector</b>	12 VDC power cable with in-line fuse • 15ft (4.57m)
<b>Power Consumption</b>	10W

## PHYSICAL

<b>Dimensions</b>	8" x 5.5" x 2" (20.3cm x 13.9cm x 5.1cm)
<b>Weight</b>	1.8 lbs (0.8kg)
<b>Packaging</b>	IP54 industrial PC enclosure

## ENVIRONMENTAL

<b>Temperature Range</b>	-35 to 55 °C
<b>Humidity</b>	0 to 100%, non-condensing
<b>General Certifications</b>	FCC Part 15 and 90, UL, CSA
<b>Safety Certifications</b>	UL / CSA
<b>Vibration</b>	<b>MIL:</b> 810F, Method 514.5 Procedure 1, Category 24 <b>TIA:</b> TIA/EIA-603, Paragraph 3.3.4

## AVAILABLE OPTIONS

<b>Antenna</b>	Omnidirectional, 0 dBi and 3 dBi
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Motorola, Inc. [www.motorola.com/mesh](http://www.motorola.com/mesh)

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