



**wi4 Mesh**

# WMC7300

Wireless Modem Card • for 4.9GHz MOTOMESH Quattro

The WMC7300 enables 4.9GHz MOTOMESH Quattro users to wirelessly access broadband applications and create mobile ad hoc networks.



**By simply inserting the Wireless Modem Card (WMC), 6 Mbps burst data rates for streaming audio and video, fast and accurate position location, and voice services can be added to devices with a PCMCIA card slot. Motorola's Mobility Enabled Access (MEA) technology enables the WMC7300 to act as a wireless router/repeater in a MOTOMESH mobile broadband network, increasing network robustness and coverage at no additional cost. Users can instantly form Multi-Hopping, ad hoc, peer-to-peer, broadband networks with or without predeployed network infrastructure.**

#### **Broadband Designed for Public Safety**

The WMC7300 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.

For users and agencies unaffiliated with public safety, Motorola offers the WMC6300, which operates in the unlicensed, 2.4GHz band. Both Wireless Modem Card versions offer the same, outstanding combination of throughput, mobility and connectivity that first responders need.

#### **Robust Data Rates for Mobile Broadband**

The WMC7300 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.

#### **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**

Client devices with Wireless Modem Cards can form their own peer-to-peer network – any time and anywhere. A high speed, broadband network will automatically form between authorized devices – even in places where there is no network infrastructure. Users can effortlessly establish separate, private group communications.

#### **Position Location and Navigation Services**

The Wireless Modem Card 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 WMC7300.

#### **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.

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#### **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 • WMC7300 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, 8 dBi
<b>Antenna Connector</b>	MMCX
<b>Host Interface</b>	CardBus (PCMCIA Type II form factor)

## DEVICE DRIVER

<b>Client Software</b>	MeshTray and MeshView
<b>Supported Operating Systems</b>	Windows 2000, Windows XP and PocketPC 2002

## 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 Architecture</b>	Peer-to-Peer Multi-Hopping

## 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 Consumption (Transmit)</b>	3.3W
<b>Power Consumption (Receive)</b>	2.0W

## PHYSICAL

<b>Dimensions</b>	3.37" x 2.126" x 0.19" (8.6cm x 5.4cm x 0.5cm)
<b>Weight</b>	1.13 oz (30.8g)
<b>Packaging</b>	Standard PCMCIA Type II form factor
<b>LED Indicators</b>	Transmit and Receive

## 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

## AVAILABLE OPTIONS

<b>Antenna</b>	Magnetic mount antenna for vehicles available
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Motorola, Inc. [www.motorola.com/mesh](http://www.motorola.com/mesh)

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