MOTOROLA

# WMC7300

## Wireless Modem Card • for MOTOMESH


## The WMC7300 enables 4.9GHz MOTOMESH 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 Mesh Enabled Architecture (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.

**Motorola's mesh networking technology enables users to wirelessly access critical broadband applications seamlessly – any time, and anywhere. Whether utilizing predeployed infrastructure, or an instant, ad hoc, broadband network formed with other users, Motorola's mesh networking technology delivers real-time data to detect, prevent, respond.**

### 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.

| WMC7300 RADIO CHARACTERISTICS | |
|---|---|
| Output Power | 24 dBm |
| RF Modulation | QDMA |
| Operating Frequency (GHz) | 4.950 - 4.965 |
| Maximum Burst Data Rate | 6 Mbps |
| Spectrum Used | 20MHz |
| Antenna Type | Omnidirectional, 3.6 dBi |
| Antenna Connector | MMCX |
| Host Interface | PCMCIA |

| DEVICE DRIVER | |
|---|---|
| Client Software | MeshTray and MeshView |
| Supported Operating Systems | Windows 2000, Windows XP and PocketPC 2002 |

| NETWORK | |
|---|---|
| Network Managament Software | MeshManager via SNMP |
| Network Architecture | Peer-to-Peer Multi-Hopping |

| SECURITY | |
|---|---|
| Virtual Private Network (VPN) | Support for FIPS-140-2 compliant encryption (Padcom, RadioIP and NetMotion) |
| Authentication | 802.1X (Infrastructure/Client and Client/Client) |

| POWER | |
|---|---|
| Power Consumption (Transmit) | 3.3W |
| Power Consumption (Receive) | 2.0W |

| PHYSICAL | |
|---|---|
| Dimensions | 3.37" x 2.126" x 0.19" (8.6cm x 5.4cm x 0.5cm) |
| Weight | 1.13 oz (30.8g) |
| Packaging | Standard PCMCIA form factor |
| LED Indicators | Transmit and receive |

| ENVIRONMENTAL | |
|---|---|
| Temperature Range | -35 to 55 °C |
| Humidity | 0 to 90%, non-condensing |
| Certifications | FCC Part 15 & 90, UL, CSA |

| AVAILABLE OPTIONS | |
|---|---|
| Antenna | Magnetic mount antenna for vehicles available |

# MOTOMESH Additional Network Features

- Advanced Encryption Standard (AES) Support for Wi-Fi Clients
- Layer 2 Multicast Support
- Network Time Protocol (NTP) support
- Differentiated Services using IP Quality of Service (QoS) Support
- Over-the-Air Software Upgrade Support
- MAC Access Control lists
- Web (HTTP) based management interface
- SNMP agent for remote management
- Telnet interface with command-line management
- Firmware Upgrades via Trivial File Transfer Protocol (TFTP)

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**Motorola, Inc.** P.O. Box 948133 • Maitland, Florida 32794-8133 U.S.A.
www.motorola.com/mesh • 407-659-5300 • Fax 407-659-5301



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