MOTOROLA

MOTO**WI**4

WMC6300

Wireless Modem Card • for 2.4GHz MEA

The WMC6300 enables 2.4GHz MEA 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 other data services can be added to devices with a PCMCIA card slot. Motorola's MEA technology enables the WMC6300 to act as a wireless router/ repeater in a 2.4GHz MEA 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 – virtually 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.

6 Mbps Burst Data Rate Mobile Broadband
Clients get up to 6 Mbps burst rate for voice, video and data. High-bandwidth applications, such as web browsing, imaging, telemetry and high-quality streaming audio and video are just a few of the many new mobile services Motorola enables.

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 WMC6300.

High Quality Voice and Video Services
The Wireless Modem Card adds real-time voice and video services to a wide range of devices.

Over-the-Air (OTA) Network Management
Every MEA 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.

Create Peer-to-Peer Networks Anywhere
Client devices with MEA 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. Companies, families, and communities-of-interest can establish private and effortless group communications.

End-to-End Industry Standard IP Support
A MEA network supports end-to-end, standards-based Internet Protocol (IP), so any IP based application or IP capable device works seamlessly within the network. No modifications or special gateways are needed.

WMC6300 RADIO CHARACTERISTICS

Chipset	Motorola MN2064A
Output Power	Nominal 23 dBm
RF Modulation	QDMA
Operating Frequency (GHz)	2.4 - 2.4835 (2nd ISM Band)
Maximum Burst Data Rate	6 Mbps
Spectrum Used	60MHz
Antenna Type	Remotely locatable omnidirectional, 2 dBi
Antenna Connector	MMCX
Host Interface	CardBus (PCMCIA Type II form factor)

DEVICE DRIVER

Client Software	MeshTray and MeshView
Supported Operating Systems	Windows 2000, Windows XP and PocketPC 2002

NETWORK

Network Management Software	MeshManager Element Management System via SNMP v.3

SECURITY

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

POWER

Power Consumption (Transmit)	3.3W
Power Consumption (Receive)	1.5W

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 Type II form factor
LED Indicators	Transmit and receive

ENVIRONMENTAL

Temperature Range	-35 to 55 °C
Humidity	0 to 90%, non-condensing
General Certifications	FCC Part 15, RSS-210
Safety Certifications	IEC 60950, EN 60950, EN 60215, CSA C22.2 No. 60950-00010
CE Mark	ETSI EN 301 489-1, ETSI EN 301 489-17

AVAILABLE OPTIONS

Antenna	Magnetic mount antenna for vehicles, and PDA antenna options are available

2.4GHz MEA Additional Network Features

- 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
- Firmware Upgrades via Trivial File Transfer Protocol (TFTP)