

# MWR6300

Mesh Wireless Router • for 2.4GHz MEA



The MWR6300 extends coverage and connectivity in a 2.4GHz MEA network by meshing access points and users together.

By allowing data and video to hop through one or more Mesh Wireless Router (MWR), Mesh Enabled Architecture enables robust, non-line-of-sight communications between users and the network. Mesh Wireless Routers also act as reference points for position location of users and vehicles within the 2.4GHz MEA network. The MWR6300 requires only power to operate, as data is transmitted 100% wirelessly between nodes.

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.

#### **Compact and Low Cost**

Wireless Routers use the same transceiver technology developed for our Wireless Modem Cards (WMC6300). This creates a compact, low-cost solution for range extension and non-line-of-sight operation.

#### **Easy to Install and Deploy**

Wireless Routers are designed to mount on utility poles, billboards, buildings, etc. Simple mounting hardware and a plug-in power connection speeds deployment. They automatically power up and integrate into the network, requiring no manual provisioning or configuration.

#### **Supports End-to-End Industry Standard IP**

As one part of the MEA solution, Mesh Wireless Routers transparently support end-to-end, standards-based Internet Protocol (IP) applications and devices. This maximizes existing investments in client hardware and software, while eliminating training for new applications or procedures.

#### **Over-the-Air Software Updates**

New features and services can be added to the MWR6300 via over-the-air software downloads.

#### **Automatic Network Balancing**

Mesh Wireless Routers intelligently balance traffic between client demand and network resources. Clients are routed around local congestion, while Multi-Hopping technology enables capacity from distant access points to be "moved" to exactly where it is needed. Network resource utilization is continually optimized, reducing network and operational expenses.

#### **Enables Non-Line-of-Sight Networking**

Mesh Wireless Routers enable non-line-of-sight communications between clients and IAPs, as well as between clients in peer-to-peer networking mode. Wireless Routers act as hopping points for any transmission, and work in concert with IAPs to form a distributed network infrastructure.

## MWR6300 RADIO CHARACTERISTICS

Output Power	Up to 25 dBm
RF Modulation	QDMA
Operating Frequency (GHz)	2.4 - 2.4835 (2nd ISM Band)
Maximum Burst Data Rate	6 Mbps
Spectrum Used	60 MHz
Antenna Type	Omnidirectional, 8 dBi
Antenna Connector	N-Type

## SECURITY

Virtual Private Network (VPN)	Support for FIPS-140-2 compliant encryption (Padcom, RadiolP and NetMotion)
Authentication	802.1X

## POWER

Power Requirements	90 to 264 VAC, 47 - 63 Hz single phase
Power Connector	AC, NEMA 5-15 power cord • 6 ft (1.83m)
Power Consumption	10W Maximum at 120VAC

## PHYSICAL

Dimensions	3" x 4.25" x 5.75" (7.6cm x 11.5cm x 14.6cm)
Weight	2.6 lbs (1.18kg)
Packaging	NEMA 4 environmental enclosure for indoor or outdoor deployment

## ENVIRONMENTAL

Temperature Range	-35 to 55 °C
Humidity	0 to 100%, 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

Power	Cable assembly, or AC photo cell power adapter
DC Input	MWR6300 with 5-14VDC input
Antenna	Ask your sales representative for other antenna options

# 2.4GHz MEA Additional Network Features

- 1 Network Time Protocol (NTP) support
- 1 Differentiated Services using IP Quality of Service (QoS) Support
- 1 Over-the-Air Software Upgrade Support
- 1 MAC Access Control lists
- 1 Web (HTTP) based management interface
- 1 SNMP agent for remote management
- 1 Firmware Upgrades via Trivial File Transfer Protocol (TFTP)



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