

## M4.4040

### *Enhanced Mesh Node (PWR)*

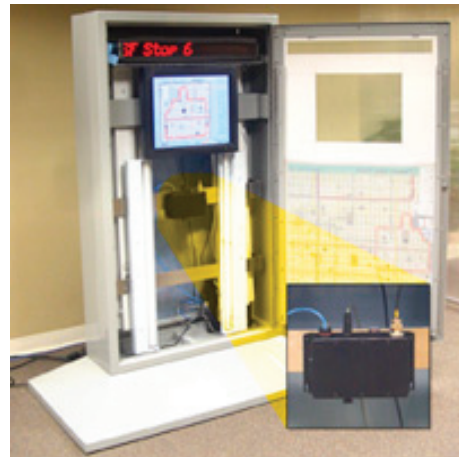
MESH4G™ networking technology enables users to wirelessly access critical broadband applications anywhere, at any time. High speed data is provided via predeployed infrastructure, or by creating an instant, ad-hoc, broadband network with other users capable of delivering real-time data to detect, prevent, respond.

The Enhanced Mesh Node (M4.4040) provides wireless network access to one or more Internet Protocol (IP) devices via a standard, RJ45 Ethernet port, while also providing wireless access over large geographic areas. It efficiently combines the functionality of a MESH4G™ wireless router and subscriber modem in a single, cost-effective, wireless network component. This makes it easy for Ethernet-ready devices to access a MESH4G™-Enabled Architecture mobile broadband network.

Computers, IP video cameras, sensors, signs, etc. can be mesh-enabled to send and receive data at burst rates of up to 6 Mbps. Standard wireless router functionality, including Multi-Hopping, non-line-of-sight communications and position location services, is fully supported.

Enhanced Mesh Nodes Also Provide:

- Range extension between clients and IAPs
- Fixed reference points for position location services
- Up to 3 assignable IP addresses



### Compact & Low Cost

By combining the functionality of a wireless router and subscriber modem in a single device, network equipment and deployment costs are significantly reduced.

### Rapid Installation and Deployment

Enhanced Mesh Nodes are designed as an infrastructure device to be positioned in a fixed location within a weatherproof enclosure, such as a traffic control cabinet or outdoor kiosk. Simple mounting hardware, plug-in power and Ethernet connectivity speeds deployment. No special training or skills are required. The node automatically powers-up and integrates into the network.

### Multiple IP Address Support

The Enhanced Mesh Node supports three IP addresses, allowing a network of end-user devices to be addressed and managed over the MESH4G™ network. By adding a NAT router, four or more devices can be supported.

### Over-the-Air Software Updates

New features and services can be added via over-the-air software downloads. This simplifies network maintenance and improves network management.

# Metropolitan Wireless

## Automatic Network Balancing

The Enhanced Mesh Node intelligently balances traffic between client demand and network resources. Clients are routed around local congestion, while Multi Hopping technology enables capacity from distant MESH4G™ Access Points (IAPs) to be “moved” to exactly where it is needed. Network resource utilization is continually optimized, reducing operational expenses.

## Enables Non-Line-of-Sight Networking

Enhanced Mesh Nodes act as hopping points for wireless data packets, and work in concert with IAPs to form a distributed network infrastructure. The nodes provide non-line-of-sight communications between wireless clients and IAPs, as well as between clients that are part of ad-hoc peer-to-peer networks.

## M4.4040 SPECIFICATIONS:

### GENERAL INFORMATION

#### Data Rate >

1.5 to 6 Mbps burst, depending on configuration

#### Certifications >

US-FCC Part 15

IEC 60950

EN 60950

EN 60215

CSA C22.2 No. 60950-000

RSS-210

#### Power Consumption >

R x 1.0 A / T x 1.5 A

#### Power Requirements >

5.0 to 14v DC

#### Power Cord >

12v DC with 2 amp, in-line fuse/15ft of 18 AWG wire

### NETWORK INFORMATION

#### Network Management >

MeshManager via SNMP

#### Network Interface >

10/100 Mbps Ethernet, RJ45

#### Configurable Network Drives >

3 Assignable IP addresses - Hub needed to connect more than one device

### RADIO

#### Output Power >

Up to 25 dBm

#### RF Modulation >

QCMR

#### Operating Frequency >

2.4 GHz - 2nd ISM band

#### Antenna Connector >

N-Type

### PHYSICAL

#### Dimensions >

8" x 5.5" x 2"  
(20.3cm x 14cm x 5cm)

#### Weight >

2 lbs (907g)

### ENVIRONMENTAL

#### Temperature Range >

-35 to 60 °C

#### Humidity >

0-100%

### AVAILABLE OPTIONS

#### Antenna >

Magnetic Mount 0 dBi

Magnetic Mount 3 dBi