

M4.4020

Mesh Node (VMM)

Compact and ruggedly designed, the NOW Wireless Mesh node (M4.4020) turns a vehicle into a mobile office. Mobile Data Terminals (MDT), IP video cameras, and other IP ready devices can access a highspeed, mobile broadband network via a standard RJ45 Ethernet Port. This low cost, high performance, wireless modem supports up to 6 Mbps burst data rates at speeds of over 100 mph.

This Mesh node provides high bandwidth access to Mission critical information on the move. Remote database inquiries, on-scene report submission, multi-megabyte file transfers and live video streams will make field personnel more efficient. The Mesh node also supports real-time position location without relying on GPS.

Like all MESH4G™ products, the Mesh node acts as a wireless router repeater - automatically extending the range, robustness and performance of the wireless network.

End-to-End Industry Standard IP Support

MESH4G™ networks support end-to end, standards-based Internet Protocol (IP). Any IP based application or IP capable device works seamlessly in the MESH4G™ network, including FIPS 140 compliant VPNs. The Mesh node supports three IP addresses, allowing a network of in-vehicle devices to be addressed and managed wirelessly.



Symmetric Burst Data Rates of up to 6 Mbps

Unlike other mobile broadband technologies that provide limited uplink speeds, the NOW Wireless Mesh node supports up to 6 Mbps burst rates. Photographs and even live video can be sent from vehicles in the field to other users or remote operations centers.

Engineered for Data on the Move

Designed for heavy-duty use in commercial and public vehicles, this rugged and compact device is made to withstand heat, shock and vibration. The Mesh node operates on 12V DC nominal (9 to 16V DC), and can be mounted in any orientation for maximum placement flexibility.

Create Peer-to-Peer Networks Anywhere

Vehicles can instantly form peer-to-peer networks with other Mesh-Enabled devices. A high-speed, broadband network will automatically form between users, even in places where no MESH4G™ network infrastructure exists.

Metropolitan Wireless

Built in Position Location Capabilities

Position location is available within a MESH4G™ network, including places where GPS doesn't work - such as urban canyons. MESH4G™ provides location data in a standard GPS format, allowing applications that operate with GPS information streams to work seamlessly with the Mesh node.

M4.4020 SPECIFICATIONS:

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, 7 dBi (magnetic mount antenna for vehicles)

Antenna Connector - N-Type

SECURITY

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

Authentication - 802.1X (Infrastructure/Client and Client/Client)

POWER

Power Requirements - 5.0 to 15 VDC

Power Connector - 12 VDC power cable with in-line fuse • 15ft (4.57m)

Power Consumption - 10W maximum

PHYSICAL

Dimensions - 8" x 5.5" x 2" (20.3cm x 13.9cm x 5.1cm)

Over-the-Air Network Management

Every MESH4G™ product is a managed element within the network. New features and services can be added via over-the-air software uploads. End-to-end IP support also enables IT managers to download and update client software wirelessly, greatly simplifying software maintenance procedures.

Weight - 2.0 lbs (0.9kg)

Packaging - IP54 industrial PC enclosure

NETWORK

Network Management Software - MeshManager via SNMP

Network Interface - 10/100 Mbps Ethernet, RJ-45 connector

Configurable Network Devices - 3 assignable IP addresses – hub needed to connect more than one device

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

Vibration - MIL: 810F, Method 514.5 Procedure 1, Category 24

TIA: TIA/EIA-603, Paragraph 3.3.4

AVAILABLE OPTIONS

Antenna - Omnidirectional, 0 dBi and 3 dBi