

# MWS 100 SERIES

## Features

### Wireless

- ▶ The Industry's Highest-Power, Lowest Cost Mesh Network Edge Mobile Wireless Node.
- ▶ High Speed Mobility, State-Of-The-Art Network Persistence, Robust Delivery of Voice, Video and Data.
- ▶ Defined Quality Of Service (QoS)
- ▶ Low Latency and High Throughput Across Multiple Wireless Hops.
- ▶ Dynamic Channel Assignment, Automatic Power Control, Data Rate Selection for Optimum RF Spectrum Efficiency.

### System

- ▶ Plug-N-Play simplicity, auto-discover and self-configuration.
- ▶ 802.11a or 4.9 GHz DSRC-C (high power) for public safety applications.
- ▶ 802.11g radio for client access.
- ▶ Takes advantage of Strix mesh network Full-Duplex capabilities.
- ▶ Strix Access/One Edge™ extends QoS from Strix mesh networks.
- ▶ Seamless Interoperability with Strix Access/One family of products.

### Management

- ▶ Remote Management via CLI, HTTP and SNMP.
- ▶ Remote Firmware Updates.
- ▶ Client Monitor and Wireless Neighbor List.
- ▶ Event Logging and Statistics.
- ▶ Layer-2 NAT Monitor.
- ▶ Signal Strength History.

### Security

- ▶ Support for security/encryption standards including: WPA-PSK, WPA2-PSK, WEP, TKIP, AES.
- ▶ MAC Address Access Control Lists .
- ▶ Supports all L2 and L3 VPNs.

## INDUSTRYS HIGHEST PERFORMANCE MOBILE WIRELESS MESH EXTENSION

Strix Systems Access/One® Mobile Wireless System (MWS) 100, powered by Strix Access/One Edge™, is the industry's highest performance mobile extension for in-vehicle wired or wireless client connectivity to public safety,



railway, municipal, strategic or tactical Strix wireless broadband mesh networks. The MWS 100 is small, sleek, durable and portable, designed for any vehicle type, enabling the longest reach and instant mesh hand-off compared to any other mobile wireless devices. Delivering seamless mobility for public safety, emergency medical, fire, industrial, mobile enterprise and many other applications, the MWS offers superior multi-megabit, multi-RF, multi-channel capabilities unique in the industry. Strix adds the latest in Strix Access/One Edge technology into this compact unit with Quality of Service (QoS) for voice, video and data provided by the Strix mesh network and industry-standard security algorithms for secured client connectivity. The MWS 100 offers a four-fold increase in power, penetration and performance for a robust network experience enabling the highest speed connection for wired or wireless laptops, PDA's and other approved 4.9 GHz devices. Utilizing dual-diversity antenna technology, intelligent radio algorithms and intelligent Access/One Edge capabilities, the MWS maximizes signal strength and performance, detecting alternate nodes as it traverses the larger wireless mesh network, optimizing channel selections and instantaneously establishing best network path criteria. As mobile network paths are



selected, mesh links are secured while the mobile mesh node continues the process of optimal path determination. All Strix Access/One devices enable interference mitigation, provide network resiliency, and offer built-in troubleshooting tools and remote upgradeability to support the most demanding environments.

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# Technical Specifications

## Wireless

- ▶ Wireless Standards: IEEE 802.11a/b/g
- ▶ Frequency Bands:
  - 802.11a/4.9 GHz radio is DSRC-C mask compliant
  - 802.11g 2.4 - 2.497 GHz  
(Availability of specific bands is dependent on region model number)
- ▶ Data Rates (Mbps):
  - 6, 9, 12, 18, 24, 36, 48, 54
- ▶ Transmit Power:
  - 802.11a: 26 dBm
  - 4.9 GHz: 30 dBm
  - 802.11b/g: 26 dBm
- ▶ Receiver Sensitivity:

802.11g:	802.11a/4.9:
-98 dBm @ 1 Mbps	-93 dBm @ 6 Mbps
-94 dBm @ 5.5 Mbps	-90 dBm @ 12 Mbps
-91 dBm @ 11 Mbps	-84 dBm @ 24 Mbps
-93 dBm @ 6 Mbps	-81 dBm @ 36 Mbps
-91 dBm @ 12 Mbps	-76 dBm @ 48 Mbps
-85 dBm @ 24 Mbps	-74 dBm @ 54 Mbps
-82 dBm @ 36 Mbps	
-77 dBm @ 48 Mbps	
-75 dBm @ 54 Mbps	
- ▶ LO (crystal) Frequency Stability:
  - +/-20PPM

## Ethernet LAN

- ▶ 10/100Base-T (auto-sensing)

## LAN Indicators

- ▶ Power and Signal

## Electrical

- ▶ External Power Supply Input:
  - 12 - 48 VDC +/- 10%
- ▶ Vehicle-rated surge suppression
  - 10.8 VDC cutoff
- ▶ Ethernet with PoE
- ▶ 10W max power consumption

## Physical

- ▶ Dimension: 9.5"(24cm)L x 6"(16cm)W x 2"(5cm)H
- ▶ Weight: 1.5 Lb (0.6 g)
- ▶ Temperature: -40°F (-40°C) to 131°F (+55°C)
- ▶ Humidity: 95% Non-condensing

## Operating Modes

- ▶ 802.11a/4.9 STA, 802.11b/g AP
- ▶ Cross-subnet mobility
- ▶ VLAN mapping for client traffic
- ▶ L2 NAT / Client bridge between radios and Ethernet port

## Security

- ▶ Wi-Fi Protected Access (WPA-PSK)
- ▶ Wi-Fi Protected Access 2 (WPA2-PSK)
- ▶ Wireless Equivalency Protocol (WEP)
- ▶ Temporal Key Integrity Protocol (TKIP)
- ▶ Advanced Encryption Standard (AES)
- ▶ MAC Address Access Control Lists

## Remote Management

- ▶ CLI, HTTP, SNMP
- ▶ Local management over Ethernet
- ▶ Remote management over network management VLAN
- ▶ Remote firmware upgrade

## Troubleshooting

- ▶ Client monitor, wireless neighbor list
- ▶ Event logging and statistics
- ▶ L2 NAT monitor
- ▶ Signal strength history

## Warranty

- ▶ One year warranty on parts

## Ordering Information

### MWS100-NA

*Configured for operation in North America*

### MWS100-EU

*Configured for operation in E.U. countries*

### MWS100-RW

*Configured for operation in R.W. countries*

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