Described to Maximize Bandwidth and Link Reliability in Noisy Environments

The Tsunami® MP-10250 BeamX product family uses a beam steering antenna and a secondary, look-ahead scan radio to avoid interference and maximize the use of available radio spectrum. The Tsunami® 10250, builds on the successful 10000 product line, and is extremely robust in the face of high ambient RF interference, delivers more Mbps and opens up additional 5GHz spectrum.

Fast, Secure and Flexible

- Point-to-Multipoint base station and subscriber unit that delivers up to 866 Mbps data rate and covers distances up to 10 miles (16 km)
- AES 128 encryption, Radius authentication, and highly-secure remote management via SSL/TLS1.2, SSH, and SNMPv3
- Service flow based QoS with deep packet inspection (DPI) to ensure critical data arrives with priority
- Built-in feature-rich network protocols for IPv4 and IPv6 bridging, routing and gateway functionality

Proxim SmartScan™

- Performs background analysis of the full RF spectrum and creates channel availability tables to allow an immediate switch to a free channel in case of weather radar detection or interference
- By removing the initial transmission delay, SmartScan makes DFS channel more efficient
- It also opens access to the 5.600–5.650 GHz sub-band and enables effective use of up to 355 MHz of DFS spectrum

BeamX™ Antenna

- Smart antenna delivering a 17° beam that electronically steers itself to the remote subscriber unit over a 60° sector, to limit interference from nearby RF sources
- By improving the radio Signal to Noise Ratio (SNR), BeamX enables higher modulations and thus improves throughput
- BeamX speeds up deployment by removing the antenna alignment phase. Roughly aim at the remote end, and the BeamX technology does the fine-tuning, optimizing SNR

About Proxim Wireless

Proxim Wireless is a pioneer and global leader in advanced Wi-Fi, point to point, and point to multipoint outdoor wireless systems that deliver high performance and high availability communications.

With over 30 years of wireless experience, Proxim is recognized for its unparalleled reliability, superior performance and drive for innovation.
Rugged and Reliable

The Tsunami® MP-10250 BeamX product is designed for harsh environments, and is fully IP67 rated, and will deliver years of reliable service in conditions that include, high winds, high salt, and high-temperature extremes.

Key Technologies

The Tsunami® MP-10250-BeamX device supports the following features for applications that include last mile access or video surveillance, both of which need prioritized and continuous high-speed broadband wireless access:

Proxim WORP®
Combines network access control, data scheduling, advanced QoS, and encryption to ensure highly efficient and secure data transmission.

Proxim ClearConnect™
A suite of interference mitigation technologies ensuring robust and reliable communications in high-density wireless deployments.

Proxim SmartConnect™
Delivering exceptional performance in noisy RF locations by combining a beam steering antenna with a secondary look ahead scan radio to seek, manage, and select the best channel.

Product Line Compatibility

- Tsunami® MP-10250-BSX Connects to all existing Tsunami® MP/XP 10100, MP-10100L, MP-8200, MP-820 and MP-830 products
- Tsunami® MP-10250-SRX only connects to Tsunami® MP-10250-BSX
- Fully integrates within ProximVision® Advanced Cloud Based Carrier Management System and Controller

Multi-Language Support

Web Interface available in English, French, Spanish and Chinese

Specifications

<table>
<thead>
<tr>
<th>PRODUCT MODELS</th>
<th>PART NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-10250-BSX</td>
<td>901-00291 MP-10250-BSX-US</td>
</tr>
<tr>
<td>MP-10250-SRX</td>
<td>901-00292 MP-10250-BSX-WD</td>
</tr>
<tr>
<td></td>
<td>901-00340 MP-10250-SRX-US</td>
</tr>
<tr>
<td></td>
<td>901-00341 MP-10250-SRX-WD</td>
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</tbody>
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<table>
<thead>
<tr>
<th>INTERFACES</th>
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<tbody>
<tr>
<td>Wired Ethernet</td>
<td>Two auto MDI-X RJ45 10/100/1000Mbps Ethernet (Port #1 with PoE in &amp; Data, Port #2 with PoE out &amp; Data)</td>
</tr>
<tr>
<td>Wireless Protocol</td>
<td>WORP® (Wireless Outdoor Router Protocol)</td>
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<thead>
<tr>
<th>RADIO &amp; TX SPECS</th>
<th></th>
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<tbody>
<tr>
<td>MIMO</td>
<td>2x2:2 and 0x2:2 (scan radio)</td>
</tr>
<tr>
<td>Modulation</td>
<td>OFDM with BPSK, QPSK, QAM16, QAM64, QAM256</td>
</tr>
<tr>
<td>Frequency</td>
<td>4.900 – 5.850 GHz (Subject to Country Regulations)</td>
</tr>
<tr>
<td>Channel Size</td>
<td>80 MHz, 40 MHz and 20 MHz</td>
</tr>
<tr>
<td>Data Rate</td>
<td>MCS 0 to 9 with Dynamic Data Rate Selection</td>
</tr>
<tr>
<td>TX Power</td>
<td>Up to 28 dBm (dual chain)</td>
</tr>
<tr>
<td>TX Power Control</td>
<td>0 - 27 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit</td>
</tr>
</tbody>
</table>
**Tsunami® MP-10250-BeamX Series**

### TX Power (Dual RF)
- 80 MHz: 28 dBm
- 40 MHz: 28 dBm
- 20 MHz: 29 dBm
- N/A

### RX Sensitivity (Per=10%)
- 80 MHz: -89 dBm
- 40 MHz: -93 dBm
- 20 MHz: -94 dBm
- N/A

### Throughput
- Up to 672 Mbps
- Up to 324 Mbps
- Up to 137 Mbps
- N/A

### Dynamic Channel Selection (DCS)
Dynamic Channel Selection (DCS) based on interference detection. Dynamic Frequency Selection (DFS) based on radar signature. Automatic Transmit Power Control (ATPC) with EIRP limit support.

### Beam Width
17° spanning over ± 30° sector

### Receive Gain
16 dBi (11 dBi before 5.150 GHz)

### Transmit Gain
20 dBi (11 dBi before 5.150 GHz)

### Remote SNMP
Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3

### Other Multi-Language Support
Web interface available in English, French, Spanish, and Chinese

### Management SNMP
SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB

### Other Syslog, sFlow™ agent, SNTP, and local time, Spectrum analyzer

### Security Encryption
- AES 128
- Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)

### QoS Asymmetric Bandwidth Control
Asymmetric UL/DL committed and maximum information rate per service flow

### Packet Classification
802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType

### Capabilities
Best Effort, Real Time Polling Services

### Network Modes Bridging, Routing (RIP v2 and IPv6 tunneling)
IPv4 and IPv6 simultaneously

### IP Stack DHCP Server & relay, NAT with Std ALGs, PPPoE end point with Proxy DNS

### VLAN 802.1Q: Management VLAN. Transparent, Access, Trunk, and Mixed mode. QinQ double tagging

### Power Input
- 36 to 57 VDC via Ethernet port 1 (Power over Ethernet)
- 12 VDC via Access port

### Output
- 48 to 57 VDC – 25 Watt on Ethernet port 2 (PoE – software controlled)
- 12 VDC on Access port

### Power Consumption
30 Watt typical, 40 Watt maximum

### Environmental Specs Operating Temperature
- -40º to 60ºC (-40º to 140º Fahrenheit)

### Storage Temperature
- -50º to 70ºC (-58º to 158º Fahrenheit)

### Humidity - IP Rating
100% relative humidity - IP67

### Wind Loading
200 km/h (125 mph)

### Physical Specs Dimensions (Packaged)
- 18.46 x 7.05 x 21.57 in (469 x 179 x 548 mm)
- 14 x 14 x 3.40 in (371 x 371 x 85 mm)

### Weight (Packaged)
13.67 lbs (6.2 kg)

### Weight (Unpackaged)
7.27 lbs (3.3 kg)

### Safety Standards
UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -22)

### Certifications
USA: FCC 90Y + 15E (UNII 15.247), Canada: IC RSS 102 + RSS 111 + RSS 247, Europe: RED EN 301 489-1 + EN 301-489-17 + EN 301 893 + EN 302 502
### PACKAGE CONTENTS

- One Tsunami® MP-10250-BSX/SRX with integrated BeamX antenna and scan radio
- One power injector and country specific power cord
- One Connector weatherproofing kit (Includes all recommended weatherproofing material)
- One Wall / Pole mounting kit
- One Antenna alignment (RJ11) dongle
- One Grounding kit
- One Quick Installation Guide

### MTBF & WARRANTY

MTBF over 250,000 hours & 2-year warranty with ServPak Extended Support available