Simplifying dense network deployment with multiple Base Station synchronization

With the increase of wireless network using the 5 GHz band, finding interference free channel is becoming a challenge. To simplify channel planning task, Proxim wireless introduces Tsunami® MP-8200-BSU-G which adds multiple Base Station synchronization to the versatile and high performance Tsunami® 8200 series.

The Tsunami® MP-8200-BSU-G includes the capability to synchronize its internal clock to the one pulse per second signal of an external GPS receiver or an Ethernet based synchronization module. When loaded with Proxim’s optional WORP® Sync software, multiple MP-8200-BSU-G start following the same transmit/receive pattern and avoid interfering with each other even when using adjacent channels. Tsunami® MP-8200-BSU-G synchronization mechanism added to MIMO 3x3 nLOS functionality, advanced channel management capability and cutting edge QoS class of service ensures optimal delivery of voice, video and data applications

With supreme throughput, high power radio, flexible channel features and dual Gigabit Ethernet ports with PoE out, for powering additional devices, the Tsunami® MP-8200 series is an ideal solution for service providers and government organizations with requirements of all kinds, from last mile broadband wireless access (BWA) to wireless video surveillance and more.

World-class Performance

- Point to Multipoint solution that can deliver 300 Mbps data rates
- High power radio capable of up to 25.8 dBm Tx power to extend the range and coverage
- Dual IPv4 and IPv6 stack for transparent evolution to tomorrow networks

Optimal RF Management

- Multiple Base Station synchronization based on PPS signal from GPS of Ethernet based Synchronization Module
- Non-line-of-sight capable, utilizing OFDM and 3x3 MIMO techniques to improve link performance and penetrate through or around obstructions better
- Spectrum analysis feature helps to study frequency bands for interference, and select a relatively low interference channel.
- Operates in licensed and unlicensed frequency bands from 4.900 to 5.925 GHz with support for 5, 10, 20 and 40MHz channel size

Enhanced Feature set

- Choice of WORP® or WORP® Sync protocol based on application requirements
- Dual Gigabit Ethernet ports with PoE in/out to power other devices like surveillance cameras and wireless access points
- Service flow based QoS with comprehensive packet identification to create unique and sophisticated service rules and tiered service classes with ease
- Bridging mode with full VLAN capabilities or Routing mode with gateway features

Carrier-Grade Security

- Implements tiered security layers for the most secure outdoor wireless communications in the unlicensed frequency spectrum
- Utilizes Proxim’s Wireless Outdoor Routing Protocol, which prevents snooping, and features highly-secure remote management via SSL, SSH and SNMPv3
- Provides military-grade security with AES encryption technology, prevents unsecure client-to-client communications and leverages MAC, Ethertype and IP address packet filtering for granular network security

Product Line Compatibility

- Connects to all existing Tsunami® MP-8200, MP-8100 and Tsunami® MP.11
### Tsunami® MultiPoint 8200-BSU-G

**Technical Specifications**

**COMPETITIVE BROADBAND SERVICE ACCESS**  
Alternative to DSL or cable for residences and T1 or Ethernet for businesses

- **Security and Surveillance**  
  High definition IP-surveillance cameras for monitoring city streets, airports, bridges, seaports, transportation hubs, offices and warehouses

- **Metropolitan Area Networks**  
  Secure and reliable connectivity between city buildings

- **Emergency First Responders**  
  Critical information delivery such as medical data and video feeds during in-progress events

- **Enterprise Campus Connectivity**  
  Extend the main network to remote offices, warehouses or other buildings without leased lines

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**APPLICATIONS**

- **Last Mile Access**


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**PRODUCT MODELS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-8200-BSU-G</td>
<td>Tsunami® MP 8200 Base Station Unit, 300 Mbps, MIMO 3x3, GPS ready, Type-N Connectors</td>
</tr>
<tr>
<td>MP-8250-BSU-G</td>
<td>Tsunami® MP 8250 Base Station Unit, 100 Mbps, MIMO 2x2, GPS ready, 23 dbi, 10” panel antenna</td>
</tr>
<tr>
<td>MP-8250-BSG-G</td>
<td>Tsunami® MP 8250 Base Station Unit, 300 Mbps, MIMO 2x2, GPS ready, 16 dbi, 90° sector antenna</td>
</tr>
</tbody>
</table>

**INTERFACES**

- **WIRELESS SERVER**
  - Two auto MDI-X RJ45 10/100/1000Mbps Ethernet  
    - Port #1 with PoE in & Data  
    - Port #2 with PoE out (802.3af pin out) & Data

**WIRELESS PROTOCOLS**

- WORP™ (Wireless Outdoor Router Protocol)

**RADIO & TX SPECS**

<table>
<thead>
<tr>
<th>Channel Size</th>
<th>Frequency</th>
<th>Modulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 MHz, 20 MHz, 10 MHz</td>
<td>5 MHz channel bandwidths</td>
<td>Not applicable for DFS Band</td>
</tr>
</tbody>
</table>

**POWER CONSUMPTION**

- 12 Watt typical (22 Watt max)

**ENVIRONMENTAL SPECS**

- **OPERATING TEMPERATURE**
  - 40°F to 60°C (-40°F to 140°F Fahrenheit)
  - Will continue operating if temperature temporarily varies between -50°F and 70°C (-58°F and 158°F Fahrenheit)

- **STORAGE TEMPERATURE**
  - -55°F to 80°C (-67°F to 176°F Fahrenheit)

- **HUMIDITY**
  - 100% relative humidity - IP67

**WEIGHT**

- 15 lbs (6.8 kg)
- 16.31 lbs (7.4 kg)
- 9.01 lbs (4.1 kg)

**MTBF & WARRANTY**

- >250,000 hours & 1-year on parts and labor; ServPak Extended Support available.

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**TABLES**

<table>
<thead>
<tr>
<th>RF SPECIFICATIONS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PHYSICAL SPECS</strong></td>
<td>Dimensions</td>
</tr>
<tr>
<td>MP-8200-BSU-G</td>
<td>14.56 x 11.69 x 8.18 in. (370 x 348 x 208 mm)</td>
</tr>
<tr>
<td></td>
<td>15 lbs (6.8 kg)</td>
</tr>
<tr>
<td>MP-8250-BSU-G</td>
<td>15.94 x 15.94 x 9.21 in. (405 x 405 x 234 mm)</td>
</tr>
<tr>
<td></td>
<td>16.31 lbs (7.4 kg)</td>
</tr>
<tr>
<td>MP-8250-BSG-G</td>
<td>14.17 x 14.17 x 3.70 in (370 x 370 x 94 mm)</td>
</tr>
<tr>
<td></td>
<td>9.01 lbs (4.1 kg)</td>
</tr>
</tbody>
</table>

**SAFETY STANDARDS**

- UL 60950, CSA C22.2 No. 60950, IEC 60950, EN 60950 (part 1 - and 22)

**PACKAGE CONTENTS**

- One Tsunami® MP-8200-BSU-G, with three N-type surge protected connectors
- One Tsunami® MP-8250-BSU-G or BSF-G, with integrated dual polarized antenna
- Power injector and country specific power cord
- One Wall / Pole mounting kit
- One Connector weatherproofing kit (Includes all recommended weatherproofing material)
- One Serial (RJ11 to DB9) dongle
- One Antenna alignment (RJ11) dongle
- One Grounding kit
- One Gigabit PoE Surge Arrestor
- One Quick Installation Guide

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