Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range broadband wireless solutions. Leveraging the advantages of OFDM, MIMO radio innovations along with Proxim’s proprietary Wireless Outdoor Routing Protocol (WORP®), Tsunami® Multipoint 825 CPE is a feature rich customer premises equipment specifically designed for the carrier, service provider and WISP market.

The low cost outdoor form factor of Tsunami® Multipoint 825 CPE is an ideal solution for large-scale wireless deployments suitable for all last-mile broadband wireless access deployments.

This CPE is also feature rich with a carrier-grade prioritization platform supporting multiple service classes that can prioritize voice, video and data applications over the widest range of operating frequencies.

**World Class Performance**
- Features a very small form factor and an outdoor rated IP67 Metal enclosure
- Available with 15 dBi integrated antenna
- 50Mbps or 100Mbps of throughput with maximum data rates of 300Mbps
- Provides flexible channel planning with support for 5150 to 5925 GHz
- Comes with a 2x2 MIMO high power radio capable of 26 dBm transmit power
- Allows flexible bandwidth allocation for service tiers
- Seamless roaming up to 295 km/h (185 mph)

**Reduction Costs for Wireless ISPs**
- License-free frequency bands worldwide provide reliable wireless broadband without the high cost of licensed frequencies
- Low-cost bundle including both radio and mounting kit provides the industry’s most aggressive price point, enabling any deployment to enjoy a quick return on investment

**Easy to Install**
- Comes as a complete compact outdoor form factor offering unprecedented ease of installation
- Deployment tools include spectrum analyzer, antenna alignment and remote management configuration
- Non Line-of-Sight capability provided by Advanced Orthogonal Frequency Division Multiplexing (OFDM) along with 2x2 MIMO eases deployment in challenging areas
- Connects to all existing Tsunami® MP11, Tsunami® 8100 and Tsunami® 8200

**All-in-One CPE with Security & Gateway Features**
- Built-in feature rich network protocols for Bridging, Routing and Gateway functionality
- Advanced encryption protects over-the-air transmission via AES-128
- Radio mutual authentication eliminates unauthorized use of the system by rogue subscriber units and man-in-the-middle attacks
- MAC, Ether type, IP address packet filtering provides granular network security
- Uses Proxim’s Wireless Outdoor Routing Protocol (WORP®) to prevent snooping
- Features highly-secure remote management via SSL, SSH and SNMPv3
- Supports either WORP® or WORP® sync to adapt to RF condition and deliver optimum performances

Presenting Proxim’s next generation Point-to-Multipoint Customer Premises Equipment
Specifications: Tsunami® Multipoint 825 CPE

PRODUCT MODELS
- MP-825-CPE-50: Tsunami® MP 825 Customer Premise Equipment, 50 Mbps, MIMO 2x2, 15 dBi integrated antenna
- MP-825-CPE-100: Tsunami® MP 825 Customer Premise Equipment, 100 Mbps, MIMO 2x2, 15 dBi integrated antenna

INTERFACES
- WIRED ETHERNET: One auto MDI-X RJ45 10/100Mbps Ethernet with PoE in
- WIRELESS PROTOCOL: WORP® (Wireless Outdoor Router Protocol) or WORP sync

RADIO & TX Specs
- MIMO: 2x2 MIMO
- MODULATION: OFDM with BPSK, QPSK, QAM16, QAM64
- FREQUENCY: 5.150 – 5.525 GHz (Subject to Country Regulations)
- CHANNEL SIZE: 40 MHz, 20 MHz, 10 MHz*, 5 MHz* channel bandwidths * Not applicable for DFS Band
- DATA RATE: MCS 0 to 15 for High Throughput mode (6.5 – 300 Mbps) with Dynamic Data Rate Selection. BPSK, QPSK, 16-QAM and 64-QAM for legacy mode (6Mbps - 54Mbps)
- TX POWER: Up to 26 dBm (dual chain)
- TX POWER CONTROL: 0 – 15 dB, in 0.5 dB steps. Automatic TPC with configurable EIRP limit
- OTHER: 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

RX SENSITIVITY (Per=10%)

<table>
<thead>
<tr>
<th>Channel Size</th>
<th>40 MHz</th>
<th>20 MHz</th>
<th>10 MHz</th>
<th>5 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCS 0</td>
<td>-88 dBm</td>
<td>-92 dBm</td>
<td>-93 dBm</td>
<td>-94 dBm</td>
</tr>
<tr>
<td>MCS 7</td>
<td>-72 dBm</td>
<td>-74 dBm</td>
<td>-75 dBm</td>
<td>-77 dBm</td>
</tr>
<tr>
<td>MCS 8</td>
<td>-88 dBm</td>
<td>-91 dBm</td>
<td>-93 dBm</td>
<td>-94 dBm</td>
</tr>
<tr>
<td>MCS 15</td>
<td>-69 dBm</td>
<td>-71 dBm</td>
<td>-72 dBm</td>
<td>-75 dBm</td>
</tr>
</tbody>
</table>

ANTENNA
- Integrated 15 dBi dual Polarized (H+V) panel antenna (14 dBi beyond 5.850 GHz)

MANAGEMENT
- REMOTE: Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3
- OTHER: Syslog, sFlow® agent, SNTP and local time, Spectrum analyzer

SECURITY
- ENCRYPTION: AES-CCM 128 bits
- AUTHENTICATION: Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)

NETWORK
- MODES: Bridging, Routing (IP v2 and IP tunneling)
- GATEWAY FEATURES: DHCP Server & relay, NAT with 3rd ALGs, PPPoE and point with Proxy DNS
- QoS: Asymmetric Bandwidth Control
  - Uplink and Downlink CIR Control “committed information rate” per service flow
  - Uplink and Downlink MIR Control “maximum information rate” per service flow
- Packet Classification Capabilities
  - 802.1Q/802.1Q/8021p priority, IPTOS, VLAN ID, IP source/destination address, source/destination port, Ethernet source/destination address, IP protocol, and Ethertype
- Scheduling
  - Best Effort, Real Time Polling Services
- VLAN
  - 802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QnQ double tagging

POWER CONSUMPTION
- 6 Watt typical (15 Watt max)

ENVIROMENTAL SPECS
- OPERATING TEMPERATURE: -40° to 55°C (-40° to 131°Fahrenheit)
- STORAGE TEMPERATURE: -55° to 70°C (-67° to 158°Fahrenheit)
- HUMIDITY, WATER & DUST PROOF: Max 100% relative humidity (non-condensing), IP67, 180 km/h (112 mph)

PHYSICAL SPECS
- DIMENSIONS (PACKAGED): 13.97 x 8.86 x 3.46 in (355 x 225 x 88 mm)
- DIMENSIONS (UNPACKAGED): 4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm)
- WEIGHT (PACKAGED): 4.9 lbs (2.225 Kg)
- WEIGHT (UNPACKAGED): 2.1 lbs (0.950 kg)

SAFETY STANDARDS
- UL 60950-1/22

PACKAGE CONTENTS
- One Tsunami® MP-825-CPE-50 with integrated antenna Or One Tsunami® MP-825-CPE-100 with integrated antenna
- One 20 W power injector and country specific power cord
- One Connector weatherprofing kit (includes all recommended weatherprofing material)
- One Grounding kit
- One Quick Installation Guide
- One basic Pole mounting kit

MTBF & WARRANTY
- >350,000 hours & 1-year on parts and labor; ServPak Extended Support available