Rugged outdoor Point-to-Multipoint CPE operating in the 5.900 – 6.425 GHz band.

The Tsunami® Multipoint 826 CPE is an ideal solution for large-scale wireless deployments and provides and excellent value propositions to WISPs planning wireless broadband last-mile access deployments. Specifically designed to operate in the 6.4 Ghz band, this product is designed to be fully compatible with the MP8620 series products.

The MP-826-CPE enables transparent roaming up to 295 km/h (185 mph) for use in mobility applications such as provision of Internet access or video surveillance on trains, trams and busses.

High Value, Long Service Life

The combination of high reliability, license-free frequency bands, and guaranteed compatibility with past, current and future Proxim base station models, ensures a long service life, and an excellent return on investment.

- Designed for harsh environments, the Tsunami® MP-826-CPE is fully IP67 rated, and will deliver years of reliable service in conditions that include, high winds, high salt, and high temperature range.

Flexible, Fast and Secure

- Designed to deliver 50 Mbps of throughput at the edge of the network.
- Provides flexible channel planning with support for 5.900 to 6.425 GHz.
- Comes with a 2x2 MIMO high power radio capable of 25 dBm transmit power.
- Advanced encryption protects over-the-air transmission via AES-128.
- Uses Proxim’s Wireless Outdoor Routing Protocol (WORP®) to prevent snooping.
- Radio mutual authentication eliminates unauthorized use of the system by rogue subscriber units and man-in-the-middle attacks.

All-in-One CPE and Gateway

- Built-in network protocols for Bridging, Routing and Gateway functionality.
- MAC, Ether type, IP address packet filtering provides granular network security.
- Features highly-secure remote management via SSL, SSH and SNMPv3.

Easy to Install

- Comes ready to install with a complete "bring-your-own-pole" installation kit that includes basic pole mount and grounding kits, connector weather proofing kit and a power injector.
- Non Line-of-Sight capability provided by Advanced Orthogonal Frequency Division Multiplexing (OFDM) along with 2x2 MIMO eases deployment in challenging areas.
- Deployment tools include spectrum analyzer, antenna alignment and remote management configuration.
- 15 dBi integrated antenna.
- Connects to all existing Tsunami® 8260 series Base Stations.

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.
Key Technologies

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 FastConnect™
Mobility technology that delivers rapid hand-off between fixed base stations and moving vehicles to ensure uninterrupted broadband at speeds up to 295 km/h (185 mph).

Specifications

<table>
<thead>
<tr>
<th>PRODUCT MODELS</th>
<th>Tsunami® MP 826 Customer Premise Equipment , 50 Mbps, MIMO 2x2, 15 dBi integrated antenna</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERFACES</td>
<td></td>
</tr>
<tr>
<td>WIRELESS PROTOCOL</td>
<td>One auto MDI-X RJ45 10/100Mbps Ethernet with PoE in WORP® (Wireless Outdoor Router Protocol)</td>
</tr>
<tr>
<td>RADIO &amp; TX SPECS</td>
<td></td>
</tr>
<tr>
<td>MIMO</td>
<td>2x2 MIMO</td>
</tr>
<tr>
<td>MODULATION</td>
<td>OFDM with BPSK, QPSK, QAM16, QAM64</td>
</tr>
<tr>
<td>OPERATING FREQUENCY</td>
<td>5.900 – 6.425 GHz (Subject to Country Regulations)</td>
</tr>
<tr>
<td>CHANNEL SIZE</td>
<td>40 MHz, 20 MHz, 10 MHz, 5 MHz channel bandwidths</td>
</tr>
<tr>
<td>DATA RATE</td>
<td>MCS 0 to 15 for High Throughput mode (6.5 – 300 Mbps) with Dynamic Data Rate Selection</td>
</tr>
<tr>
<td>TX POWER</td>
<td>Up to 25 dBm (dual chain)</td>
</tr>
<tr>
<td>TX POWER CONTROL</td>
<td>0 – 20 dB, in 0.5 dB steps. Automatic TPC with configurable EIRP limit</td>
</tr>
</tbody>
</table>

**Channel Size**

<table>
<thead>
<tr>
<th>RX SENSITIVITY (Per=10%)</th>
<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>-90dBm</td>
<td>-93dBm</td>
<td>-97dBm</td>
<td>-100dBm</td>
<td></td>
</tr>
<tr>
<td>MCS 7</td>
<td>-70dBm</td>
<td>-73dBm</td>
<td>-75dBm</td>
<td>-78dBm</td>
<td></td>
</tr>
<tr>
<td>MCS 8</td>
<td>-88dBm</td>
<td>-91dBm</td>
<td>-94dBm</td>
<td>-96dBm</td>
<td></td>
</tr>
<tr>
<td>MCS 15</td>
<td>-66dBm</td>
<td>-69dBm</td>
<td>-71dBm</td>
<td>-74dBm</td>
<td></td>
</tr>
</tbody>
</table>

**THROUGHPUT**
Up to 50 Mbps

**OTHER**
Dynamic Channel Selection (DCS) based on interference detection
Automatic Transmit Power Control (ATPC) with EIRP limit support

**ANTENNA**
Integrated 15 dBi dual Polarized (H+V) panel antenna

**MANAGEMENT**
Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3
SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB
Syslog, sFlow® agent, SNTP and local time, Spectrum analyzer

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

**QoS**
Asymmetric Bandwidth Control
UL and DL CIR Control "committed information rate" per service flow
UL and DL MIR Control "maximum information rate" per service flow
802.1D/802.1Q/802.1p priority, IPIOS, VLAN ID, IP source/destination address, source/destination port, Ethernet source/destination address, IP protocol, and Ethertype

Packet Classification Capabilities
Best Effort, Real Time Polling Services
## NETWORK

<table>
<thead>
<tr>
<th>MODES</th>
<th>Bridging, Routing (RIP v2 and IP tunneling)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP STACK</td>
<td>IPv4 and IPv6 simultaneously</td>
</tr>
<tr>
<td>GATEWAY FEATURES</td>
<td>DHCP Server &amp; relay, NAT with Std ALGs, PPPoE end point with Proxy DNS</td>
</tr>
<tr>
<td>VLAN</td>
<td>802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging</td>
</tr>
</tbody>
</table>

## POWER CONSUMPTION

6 Watt typical (15 Watt max)

## ENVIRONMENTAL SPECS

<table>
<thead>
<tr>
<th>OPERATING TEMPERATURE</th>
<th>STORAGE TEMPERATURE</th>
<th>HUMIDITY - Water &amp; Dust Proof</th>
<th>WIND LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>-40° to 55°C (-40° to 131°F Fahrenheit)</td>
<td>-55° to 70°C (-67° to 158°F Fahrenheit)</td>
<td>Max 100% relative humidity (non-condensing) - IP67</td>
<td>180 km/h (112 mph)</td>
</tr>
</tbody>
</table>

## PHYSICAL SPECS

<table>
<thead>
<tr>
<th>DIMENSIONS PACKAGED</th>
<th>DIMENSIONS UNPACKAGED</th>
<th>WEIGHT (PACKAGED)</th>
<th>WEIGHT (UNPACKAGED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.97 x 8.86 x 3.46 in (355 x 225 x 88 mm)</td>
<td>4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm)</td>
<td>4.9 lbs (2.225 Kg)</td>
<td>2.1 lbs (0.950 kg)</td>
</tr>
</tbody>
</table>

## SAFETY STANDARDS

UL 60950-1/22

## PACKAGE CONTENTS

- One Tsunami® MP-826-CPE with integrated antenna
- One 20 W power injector and country specific power cord
- One basic Pole mounting kit
- One Connector weatherproofing kit (includes all recommended weatherproofing material)
- One Grounding kit
- One Quick Installation Guide

## MTBF & WARRANTY

MTBF over 200,000 hours & 2-year warranty with ServPak Extended Support available