Proxim Wireless is a global pioneer of broadband wireless systems that deliver the quadruple play of video, voice, data and mobility. Regardless of the application, our end-to-end product portfolio enables partners to custom-build the wireless solution that fits customer’s specific needs. Our point-to-point wireless backhaul products are available through our extensive global channel networks.

Presenting Proxim’s next generation Point-to-Multipoint Customer Premises Equipment

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®), the 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 the 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 5.150 to 5.925 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 285 km/h (196 mph)

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

Reducing 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® MP.11, Tsunami® 8100 and Tsunami® 8200
Tsunami® MP-825-CPE

Technical Specifications

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 10/100/1000Base Ethernet with PoE in

WIRELESS PROTOCOLS
WORP® (Wireless Outdoor Router Protocol)

RADIO & TX SPECS

MIMO
2x2 MIMO

MODULATION
OFDM with BPSK, QPSK, QAM16, QAM64

FREQUENCY
5.150 – 5.825 GHz (Subject to Country Regulations)

CHANNEL SIZE
40 MHz, 20 MHz, 10 MHz*, 5 MHz* channel bandwidths

DATA RATE
MCS 0 to 15 for high Throughput mode (6.5 – 930 Mbps) with Dynamic Data Rate Selection
BPSK, QGPS, 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 TP with configurable EIRP limit

TX SENSITIVITY
(PER-10%) Channel size
40 MHz: -88 dBm
20 MHz: -92 dBm
10 MHz: -93 dBm
5 MHz: -94 dBm

MC 7
-72 dBm
74 dBm
-75 dBm
-77 dBm

MC 8
-86 dBm
-74 dBm
93 dBm
-94 dBm

MC 15
-69 dBm
-71 dBm
-72 dBm
-75 dBm

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

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

MANAGEMENT
TELNET Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3

SNMP
SNMP V1,v2c,v3, RFC-1213, RFC-1215, RFC-2790, RFC-2751, RFC-3412, RFC-3414, Private MIB

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 (RIP v2 and IP Tunneling)

THROUGHPUT
MP-825-CPE-50 Up to 50 Mbps
MP-825-CPE-100 Up to 100 Mbps

GATEWAY FEATURES
DHCP Server & relay, NAT with Std ALGs, PPPoE end 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

802.11D/802.1Q/802.1p priority, IETF5, 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. QinQ double tagging

POWER CONSUMPTION
6 Watt typical (15 Watt max)

ENVIRONMENTAL SPECS

TEMPERATURE
OPERATING -40°F to 122°F (-40°F to 131°F Fahrenheit)

STORAGE -55°F to 131°F (-5°F to 55°F Fahrenheit)

HUMIDITY
Max 100% relative humidity (non-condensing)

WIND LOADING
180 mph (76.5 m/s)

WATER & DUST PROOF
IP67

PHYSICAL SPECS

DIMENSIONS
PACKAGED 13.97 x 8.86 x 3.46 in (355 x 225 x 88 mm)
UNPACKAGED 4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm)

WEIGHT
PACKAGED 4.9 lb (2.27 Kg)
UNPACKAGED 2.7 lb (1.25 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 basic Pole mounting kit
One Connector weatherproofing kit (Includes all recommended weatherproofing material)
One Grounding kit
One Quick Installation Guide

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

APPLICATIONS

• Wireless Broadband/ISP
High service availability, superior subscriber per sector support and ultrafast 4G connectivity help ISPs to quickly scale their network coverage as well as meet the rising demand for high-bandwidth, multimedia services effortlessly

• Last Mile Access
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

For detailed technical specifications, please go to http://proxim.com/products/poin-to-multipoint/tsunami-mp-820-series

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