



**Tsunami™ MP 8100 CPE Series**

## End-to-End Broadband Wireless Product Portfolio

Proxim Wireless offers the industry's most complete suite of outdoor broadband wireless access products.

This portfolio includes:

- **Tsunami™ MP-8100** – Proxim's Point-to-Multipoint Product line delivering wireless performance in excess of 4G products on the market today.
- **Tsunami™ MP.11** – Proxim's best selling Point-to-Multipoint product line for global markets
- **Tsunami™ QB-8100** – Proxim's Point-to-Point Product line delivering wireless performance in excess of 4G products on the market today
- **ORINOCO® Access Point** - World-class performance enterprise 11n Access Points

**Proxim Wireless** is a global pioneer of end-to-end broadband wireless systems that deliver quadruple play services. From Wi-Fi to wireless Gigabit Ethernet – our WLAN, mesh, WiMAX and point-to-point products are available through our extensive global channel networks.

## Presenting Proxim's next generation Point-to-Multipoint subscriber unit

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™ 8100 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™ 8100 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.

## Performance and Features

- Available in both connectorized and integrated antenna variants
- 100Mbps of throughput performance with maximum data rates up to 300Mbps
- Carrier grade advanced security with AES-256<sup>1</sup> bit encryption and built-in feature-rich network protocols for bridging, routing and gateway functionality
- Supports Large ethernet frame up to 2048 bytes for backhauling MPLS traffic in carrier class deployments
- Provides flexible channel planning with support for 2.3 to 2.5 GHz and 4.9 to 6.1 GHz
- Comes with a 2x2 MIMO high power radio capable of 24dBm transmit power
- Flexible bandwidth allocation for service tiers

## 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 and compatible with Tsunami™ MP-8100 products
- Deployment tools include 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

## 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-256<sup>1</sup>
- 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

<b>Product Models</b>	
MP-8150-CPE-100a-US	Tsunami™ MP 8150 Customer Premises Equipment, 100Mbps, MIMO 2x2, 16dBi Integrated antenna – US SKU
MP-8150-CPE-100a-WD	Tsunami™ MP 8150 Customer Premises Equipment, 100Mbps, MIMO 2x2, 16dBi Integrated antenna – World SKU
MP-8100-CPE-100c-US	Tsunami™ MP 8100 Customer Premises Equipment, 100Mbps, MIMO 2x2, Type-N Connectors – US SKU
MP-8100-CPE-100c-WD	Tsunami™ MP 8100 Customer Premises Equipment, 100Mbps, MIMO 2x2, Type-N Connectors – World SKU
<b>Radio &amp; TX Specs</b>	
MIMO	2x2
Modulation	OFDM with BPSK, QPSK, 16QAM, 64QAM
Operating Frequency	2.3 - 2.5 GHz, 4.9 - 6.1 GHz ( Subject to Country Regulations and product model)
Channel Size	5MHz, 10MHz, 20MHz and 40MHz
Data Rate	Up to 300Mbps
TX Power	Up to 24dBm
TX Power Control	0.5 dB steps
Latency	5ms (typical)
Wireless Encryption	128-bit & 256-bit AES <sup>1</sup>
<b>Antenna</b>	
INTEGRATED MODEL	Integrated 16dBi dual polarized (H+V) panel antenna
CONNECTORIZED MODEL	2 Type-N Connectors
<b>Interfaces</b>	
Wired Ethernet	One Auto MDI-X RJ45 100Mbps Ethernet port
Wireless Protocol	WORP (Wireless Outdoor Router Protocol)
<b>Management</b>	
Local	RS-232 serial port with RJ11 front face
Remote	Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3
SNMP	SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB NETWORK
<b>Network</b>	
Large Frame	Up to 2048 bytes
Throughput	100Mbps (Max)
Gateway Features	DHCP Client, Server, Relay, NAT with Std ALGs, Bridging, Routing & Syslog
QoS	Asymmetric Bandwidth Control, Packet Classification Capabilities, Scheduling
VLAN	802.1Q: Management VLAN, Transparent, Access and Trunk mode
<b>Environmental Specs</b>	
Temperature	
Operating	-33° to 60° C (-27.4° to 140° F)
Storage	-40° to 70° C (-40° to 158° F)
Humidity	
Operating	Max 95% relative humidity (non-condensing)
Storage	Max 95% relative humidity (non-condensing)
Water & Dust Proof	IP65
<b>Regulatory</b>	
Certifications	FCC Part 15 Rules for U-NII devices & IC - RSS-210 ETSI - EN 300 328, EN 301 489 1/17, EN 301 893 v1.5.1, EN 302 502, EN50385
<b>Physical Specs</b>	
Dimensions (LxWxH)	
	Packaged: 385 x 315 x 110 mm
	Unpackaged: 197.5 x 192 x 100 mm
Weight (Integrated)	
	Packaged: 2.25 kg (4.96 lbs)
	Unpackaged: 0.69 kg (1.51 lbs)
Weight (Connectorized)	
	Packaged: 2.33 kg (5.14 lbs)
	Unpackaged: 0.77 kg (1.69 lbs)
<b>Electrical</b>	
Device Power Rating	7 watts (typical), 13.8 watts (max)
Input Power	via PoE Power Injector, 48V-DC 0.40A (included in the package)
MTBF	>75,000 hours
Warranty	1 year parts and labor
Package Contents	One CPE unit with 16dBi integrated antenna or two Type-N connectors, PoE Power Injector with power cord, Pole Mounting kit, Grounding kit, Connector Weather Proofing kit, printed Quick Installation guide
Accessories	Universal Mounting Bracket for wall mounting (Part # 77537)
Related Products	Tsunami™ MP-8100-BSU, Tsunami™ MP-8100-SUR/SUA, ServPak for enhanced support, ProximVision ES NMS

<sup>1</sup> Available via Software upgrade

## APPLICATIONS

- Wireless Internet Service Providers (WISP)**  
 Excellent choice for large-scale wireless deployments for high performance and quick ROI
- Business and Residential Last-Mile Access**  
 Competitive broadband service alternative to DSL or cable modems for residences and T1 or Ethernet for businesses