



Tsunami™ MP 8160 CPE

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
- **MeshMAX** – Our Tsunami™ MP.11 and ORiNOCO® access point all in one compact outdoor solution
- **ORiNOCO® AP** - World-class performing enterprise 11n access points
- **Tsunami™ MP.16** – WiMAX for the 3.5 - 3.65 GHz frequency band

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.

Proxim Wireless is a leader and an early innovator in wireless technology for providing high-speed, long-range broadband wireless access solutions. Consisting of an outdoor form factor, the 8160 CPE is designed specifically for the WISP and Video Surveillance market and accelerates the service provider's break-even point, making this product ideal for large-scale wireless deployments.

The Tsunami™ MP-8160-CPE is Proxim's next generation point to multi-point subscriber unit. The 8160-CPE provides maximum throughput performance tuned for WISP and Video Surveillance markets in Russia.

Performance and Features

- Carrier grade advanced security with AES-256 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
- Supports the frequency bands from 5.9 to 6.4GHz
- Comes with a 2x2 MIMO high power radio capable of 24 dBm transmit power
- Supports up to 8 QoS Classes; Supports up to 8 Service Flows per class
- Flexible bandwidth allocation for tiered services with aggregate throughput of 30Mbps
- Optional Russia language support in Web GUI

Reducing Costs for Wireless ISPs

- Flexible frequency bands (both licensed and unlicensed) worldwide provide reliable wireless broadband
- Low-cost bundle including both radio and mounting kit provides the industry's most aggressive price point and reduce the cost barriers for wireless broadband

Easy to Install

- Designed for quick, easy installation and compatible with Tsunami™ MP-8100 products
- Deployment tools include antenna alignment and remote management configuration
- MIMO & Advanced Orthogonal Frequency Division Multiplexing (OFDM) enhances non-line of-sight performance improving 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
- 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
- Highly secured remote management access via SSL, SSH and SNMPv3
- Proxim's proprietary Wireless Outdoor Routing Protocol (WORP) prevents snooping

PRODUCT MODELS	
MP-8160-CPE-A30	Tsunami MP 8160 Customer Premises Equipment , 30Mbps, MIMO 2x2, 15 dBi Integrated antenna
INTERFACES	
WIRED ETHERNET	One Auto MDI-X RJ45 100Mbps Ethernet port
WIRELESS PROTOCOL	WORP (Wireless Outdoor Router Protocol)
RADIO & TX SPECS	
MIMO	2x2 MIMO
MODULATION	OFDM with BPSK, QPSK, 16QAM, 64QAM
FREQUENCY	5.9 ~ 6.4GHz (Subject to Country Regulations)
CHANNEL SIZE	40 MHz, 20 MHz, 10 MHz, 5 MHz
DATA RATE	Up to 300Mbps
TX POWER	Up to 24 dBm
TX POWER CONTROL	0 – 18dB, in 1dB steps
Latency	< 3 ms
Wireless Encryption	256-bit AES
ANTENNA	Integrated 15dBi dual Polarized (H+V) Antenna
MANAGEMENT	
LOCAL	RS-232 serial (RJ11 to DB-9)
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	
LARGE FRAME	Up to 2048 Bytes
THROUGHPUT	30Mbps
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
ENVIRONMENTAL SPECS	
TEMPERATURE	
OPERATING	-33° to 55°C (-27.4° to 131° Fahrenheit)
STORAGE	-40° to 70°C (-40° to 158° Fahrenheit)
HUMIDITY	
OPERATING	Max 95% relative humidity (non-condensing)
STORAGE	Max 95% relative humidity (non-condensing)
WATER & DUST PROOF	IP65
PHYSICAL SPECS	Per 1 Unit
DIMENSIONS (LxWxH)	Packaged: 15 x 4.3 x 12.40 in (385 x 110 x 315 mm) Unpackaged: 7.8 x 3.94 x 7.56 in (198 x 100 x 192 mm)
WEIGHT	Unpackaged: 1.67 lbs (0.76 Kg)
ELECTRICAL	
POWER	Via PoE injector which should be ordered separately
MTBF	>100,000 hours
WARRANTY	1 year parts and labor
PACKAGE CONTENTS	One CPE unit with 15 dBi integrated antenna, Band Clamps for pole mount, Grounding Kit, Connector Weather proofing Kit, Quick Install Guide
ADD'T'L ACCESSORIES	PoE Power Injector (Part # 74962), Universal Mounting Bracket for wall mounting (Part # 77537)
RELATED PRODUCTS	Tsunami MP-8100 BSU, Tsunami MP-8100 / 8150 SUR SUA, Tsunami MP-8100-SUA-100/30, ServPak for enhanced support, ProximVision ES NMS

APPLICATIONS

- Business and Residential Last-Mile Access**
 Competitive broadband service alternative to DSL or cable modems for residences and T1 or Ethernet for businesses
- Video Surveillance**
 Ideal for backhauling Video Traffic from outdoor video surveillance cameras to a central location.