



Rugged outdoor Point-to-Multipoint CPE for High Performance Multi-Point Networks and Mobility Applications

The Tsunami® Multipoint 10100 CPE is an ideal solution for large-scale wireless deployments and provides an excellent price/performance for any organization in need of medium to high density point-to-multipoint networks.

The MP-10100-CPE enables seamless 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.

This CPE also features a carrier-grade prioritization platform supporting multiple service classes and able to prioritize voice, video and data applications to enable granular management of customer service features.

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-10100-CPE/CPA 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

- Allows flexible bandwidth allocation for service tiers
- Field upgradable 50, 100, 150 or 200 Mbps of throughput (license upgradeable)
- Provides flexible channel planning with support for 4.900 to 5.925 GHz
- 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/TLS1.2, 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
- Connects to all existing Tsunami® MP-10200, MP10100, MP-8200, MP-820 and MP-830 product families
- Fully integrates within ProximVision® Advanced, Proxim's Cloud Based Carrier Management System and Controller

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).

Multi-Language Support

Web Interface available in English, French, Spanish and Chinese

Specifications

PRODUCT MODELS		PART NUMBERS	
MP-10150-CPE-150	Tsunami® MP 10150 Customer Premise Equipment, 150 Mbps, MIMO 2x2, 15 dBi panel	901-00253	MP-10150-CPE-150-US
MP-10150-CPE-200	Tsunami® MP 10150 Customer Premise Equipment, 200 Mbps, MIMO 2x2, 15 dBi panel	901-00258	MP-10150-CPE-150-WD
MP-10100-CPA-150	Tsunami® MP 10100 Customer Premise Equipment, 150 Mbps, MIMO 2x2, N-Type Connectors	901-00254	MP-10150-CPE-200-US
MP-10100-CPA-200	Tsunami® MP 10100 Customer Premise Equipment, 200 Mbps, MIMO 2x2, N-Type Connectors	901-00259	MP-10150-CPE-200-WD
		901-00266	MP-10100-CPA-150-US
		901-00270	MP-10100-CPA-150-WD
		901-00267	MP-10100-CPA-200-US
		901-00271	MP-10100-CPA-200-WD
INTERFACES			
WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000Mbps Ethernet with PoE in & Data		
WIRELESS PROTOCOL	WORP® (Wireless Outdoor Router Protocol)		
RADIO & TX SPECS			
MIMO	2x2:2		
MODULATION	OFDM with BPSK, QPSK, QAM16, QAM64, QAM256		
FREQUENCY	4.900 – 5.925 GHz (Subject to Country Regulations)		
CHANNEL SIZE	80 MHz, 40 MHz and 20 MHz (±5ppm channel accuracy)		
DATA RATE	MCS 0 to 9 with Dynamic Data Rate Selection		
TX POWER	Up to 28 dBm (dual chain)		
TX POWER CONTROL	0 - 27 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit		
	80 MHz	40 MHz	20 MHz
TX POWER (dual RF)	MCS0: 28	MCS0: 28	MCS0: 29
	MCS9: 21	MCS9: 22	MCS8: 25
RX SENSITIVITY (Per=10%)	MCS0: -89	MCS0: -93	MCS0: -94
	MCS9: -68	MCS9: -71	MCS8: -74
THROUGHPUT	License controlled to 50, 100, 150 or 200 Mbps		
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			
MP-10150-CPE-xxx	Integrated 15 dBi dual Polarized (H+V) panel antenna (12 dBi before 5.000 GHz and 14 dBi beyond 5.850 GHz)		
MP-10100-CPA-xxx	Two N-type Connectors with built-in Surge Protection		
MANAGEMENT			
REMOTE	Telnet and SSH, Web GUI and SSL/TLS1.2, TFTP, SNMPv3		
SNMP	SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB		
OTHER	Syslog, sFlow™ agent, SNTP and local time, Spectrum analyzer		
Multi-Language Support	Web Interface available in English, French, Spanish and Chinese		
SYNCHRONIZATION			
	Pass-through SyncE and Precision Time Protocol (IEEE 1588v2) Ethernet Synchronization		

SECURITY				
ENCRYPTION	AES 128			
AUTHENTICATION	Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)			
QoS				
Asymmetric Bandwidth Control	Asymmetric UL/DL committed and maximum information rate per service flow			
Packet Classification	802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType			
Capabilities				
Scheduling	Best Effort, Real Time Polling Services			
NETWORK				
MODES	Bridging, Routing (RIP v2 and IP tunneling)			
IP STACK	IPv4 and IPv6 simultaneously			
GATEWAY FEATURES	DHCP Server & relay, NAT with Std ALGs, PPPoE end point with Proxy DNS			
VLAN	802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging			
POWER	INPUT		OUTPUT	
	36 to 57 VDC via Ethernet port(Power over Ethernet) 12 VDC via Access port Power should not be provided simultaneously on both ports		12 VDC on Access port	
POWER CONSUMPTION				
	11.5 Watt typical, 15.5 Watt maximum			
ENVIRONMENTAL SPECS	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY - IP RATING	WIND LOADING
	-40° to 60°C (-40° to 140° Fahrenheit)	-50° to 70°C (-58° to 158° Fahrenheit)	100% relative humidity - IP67	180 km/h (112.5 mph)
PHYSICAL SPECS	DIMENSIONS PACKAGED	DIMENSIONS UNPACKAGED	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
MP-10150-CPE-xxx	11.81x10.83x5.31 in (300x275x135 mm)	4.96x8.62x2.58 in (126x219x65.5 mm)	7.27 lbs (3.3 Kg)	2.10 lbs (0.950 kg)
MP-10100-CPA-xxx	11.81x10.83x5.31 in (300x275x135 mm)	5.02x8.68x2.85 in (127.5x220.5x72.5 mm)	6.39 lbs (2.9 kg)	2.75 lbs (1.250 kg)
SAFETY STANDARDS				
	UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -22)			
CERTIFICATIONS				
	USA: FCC 90Y + 15E (UNII 15.247), Canada: IC RSS 102 + RSS 111 + RSS 247, Europe: RED EN 301 489-1 + EN 301-489-17 + EN 301 893 + EN 302 502, Railway: EN 50155 + EN 50121 + EN 61373			
PACKAGE CONTENTS				
	<ul style="list-style-type: none"> One Tsunami® MP-10150-CPE-xxx with integrated dual polarized antenna Or One Tsunami® MP-10100-CPA-xxx with two N-type surge protected connectors One power injector and country specific power cord One Connector weatherproofing kit (Includes all recommended weatherproofing material) One Wall / Pole mounting kit (MP-10150-CPE-xxx) Or One Pole mounting kit (MP-10100-CPA-xxx) One Grounding kit One Quick Installation Guide 			
MTBF & WARRANTY				
	MTBF over 250 000 hours & 2-year warranty with ServPak Extended Support available			