Tsunami® MP-10100-CPE

Compact Point-to-Multipoint Wireless Solution

Enhanced your very high capacity network with the all new Tsunami® MP-10100-CPE

Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range and mobile broadband wireless solutions.

Proxim introduces the Tsunami® MP-10100-CPE, a compact client device with license controlled throughput based on the very high capacity, high power, extremely reliable and cost-effective, Tsunami 10100 series.

The Tsunami® MP-10100-CPE supports the following features specifically for last miles access, video surveillance or mobility applications requiring high-speed broadband wireless access

Proxim WORP®, a highly evolved QoS platform tailored to deliver voice, video and data applications

Proxim ClearConnect™, a suite of over 13 different techniques all working together to ensure robust and reliable radio communications in noisy deployments

Proxim FastConnect™, a High Speed Mobility solution for Buses, Trains, Metros and Ferries

World Class Performance

- Very small form factor and outdoor rated IP67 Metal enclosure
- Available with 15 dBi integrated antenna or N-Type connectors
- 50, 100, 150 or 200 Mbps (license upgradable) throughput, with maximum data rates of 866 Mbps
- Triple level login with monitoring, simplified or advanced web interface
- Built-in feature rich network protocols for bridging, routing and gateway functionality
- High Speed Mobility up to 185 mph (295 km/h)

Frequency Agnostic

- Operates in unlicensed bands from 4.900 to 5.925 GHz
- Flexible RF planning with 20, 40 and 80 MHz channel sizes

Near-Line-of-Sight and Advanced Features

- Performs deep packet inspection (DPI) to create unique and sophisticated service rules and tiered service classes with ease
- BSU redundancy (500 milliseconds switch over time) and Dynamic Channel Selection to ensure continuity of services whatever the condition
- Spectrum analyzer to scan frequency bands for interference and ensure operation on the best available channel

Carrier-Grade Solution

- Implements AES encryption and Radius authentication for the most secure outdoor wireless communications in the unlicensed frequency spectrum
- Utilizes Proxim's Wireless Outdoor Routing Protocol (WORP®), which prevents snooping, and features highly-secure remote management via SSL/TLS1.2, SSH and SNMPv3
- Gigabit Ethernet port with pass-through IEEE 1588v2 synchronization and support for 9k Jumbo frame sizes

Product Line Compatibility

- Connects to all existing Tsunami® MP-8200, MP-820 and MP-830 products
- Fully integrates within ProximVision® Advanced, Proxim's Cloud Based Carrier Management System and Controller

PRODUCT MODELS

Model	Description
MP-10150-CPE-50	Tsunami® MP 10150 Customer Premise Equipment, 50 Mbps, MIMO 2x2, 15 dBi panel
MP-10150-CPE-100	Tsunami® MP 10150 Customer Premise Equipment, 100 Mbps, MIMO 2x2, 15 dBi panel
MP-10150-CPE-150	Tsunami® MP 10150 Customer Premise Equipment, 150 Mbps, MIMO 2x2, 15 dBi panel
MP-10150-CPE-200	Tsunami® MP 10150 Customer Premise Equipment, 200 Mbps, MIMO 2x2, 15 dBi panel
MP-10100-CPA-50	Tsunami® MP 10100 Customer Premise Equipment, 50 Mbps, MIMO 2x2, N-Type Connectors
MP-10100-CPA-100	Tsunami® MP 10100 Customer Premise Equipment, 100 Mbps, MIMO 2x2, N-Type Connectors
MP-10100-CPA-150	Tsunami® MP 10100 Customer Premise Equipment, 150 Mbps, MIMO 2x2, N-Type Connectors
MP-10100-CPA-200	Tsunami® MP 10100 Customer Premise Equipment, 200 Mbps, MIMO 2x2, N-Type Connectors

PART NUMBERS

901-00251	MP-10150-CPE-50-US	901-00256	MP-10150-CPE-50-WD
901-00252	MP-10150-CPE-100-US	901-00257	MP-10150-CPE-100-WD
901-00253	MP-10150-CPE-150-US	901-00258	MP-10150-CPE-150-WD
901-00254	MP-10150-CPE-200-US	901-00259	MP-10150-CPE-200-WD
901-00264	MP-10100-CPA-50-US	901-00268	MP-10100-CPA-50-WD
901-00265	MP-10100-CPA-100-US	901-00269	MP-10100-CPA-100-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®

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
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	MCS0: 28	MCS0: 28	MCS0: 29
	MCS9: 21	MCS9: 22	MCS8: 25
RX SENSITIVITY	MCS0: -89	MCS0: -93	MCS0: -94
(PER=10%)	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

SYNCHRONIZATION

Pass-through 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 Capabilities	802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType
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

17 Watt typical, 22 Watt max

ENVIRONMENTAL SPECS

OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY, WATER & DUST PROOF, WIND LOADING
-40º to 60ºC (-40º to 140º Fahrenheit)	-50º to 70ºC (-58º to 158º 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)

PACKAGE CONTENTS

- 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