

Tsunami® XP-10100 Series

Point-to-Multipoint Wireless Solution with built in Access Point



Proxim introduces the Tsunami® Cross Point XP-10100, the first wireless solution that combines 5 GHz Point to Multipoint last mile access with 2.4 GHz Wi-Fi Access Point

Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range and mobile broadband wireless solutions. Proxim's Tsunami® XP-10100, is a very high throughput, high power, extremely reliable and cost-effective, near-line-of-sight point-to-multipoint (PMP) wireless solution with a built in WiFi access point.

The Tsunami® XP-10100 supports the following features specifically for last miles access, video surveillance or mobility applications that need very 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



IEEE 802.11b/g/n standard with Wi-Fi Alliance improvements

Near-Line-of-Sight and Advanced Features

- Features dual Gigabit Ethernet ports with PoE out to power other devices such as surveillance cameras or additional radios
- 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 analyze frequency bands for interference, and select the best available channel
 - Multi-SSID with VLAN allocation, plus Ethernet port access and trunk mode

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
- Features Ethernet ports with pass-through IEEE 1588v2 synchronization and support for 9k Jumbo frame

World Class Performance

- Point-to-Multipoint system that delivers up to 866 Mbps data rate and covers distances up to 10 miles (16 km)
- 802.11b/g/n Access Point that delivers 300 Mbps data rate
- Dual IPv4 and IPv6 stack for evolution to tomorrow's networks
- 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)

Product Line Compatibility

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

Specifications: Tsunami® XP-10100 Series

PRODUCT MODELS				PART NUMBERS			
XP-10150-BS1		Tsunami® XP 10150 Base Station, 866 Mbps, MIMO 2x2, 22 dBi panel antenna with 11n AP		901-00282 XP-10150-BS1-US		901-00284 XP-10150-BS1-WD	
XP-10100-SUA		Tsunami® XP 10100 Subscriber Unit, 866 Mbps, MIMO 2x2, Type-N Connectors with 11n AP		901-00236 XP-10100-SUA-US		901-00237 XP-10100-SUA-WD	
XP-10150-SUR		Tsunami® XP 10150 Subscriber Unit, 866 Mbps, MIMO 2x2, 22 dBi panel antenna with 11n AP		901-00283 XP-10150-SUR-US		901-00285 XP-10150-SUR-WD	
INTERFACES							
WIRED ETHERNET		Two auto MDI-X RJ45 10/100/1000Mbps Ethernet					
		- Port #1 with PoE in & Data - Port #2 with PoE out & Data					
WIRELESS PROTOCOL		- Radio #1: WORP® - Radio #2: Wi-Fi (802.11b/g/n)					
RADIO		Radio #1			Radio #2		
FREQUENCY		5.150 – 5.925 GHz (Subject to Country Regulations)			2.400 – 2.484 (Subject to Country Regulations)		
					802.11n		802.11g
							802.11b
MIMO MODULATION		2x2:2 OFDM			2x2:2 OFDM		N/A
		BPSK - QAM256			BPSK - QAM64		N/A
DATA RATE		Up to 866 Mbps			Up to 300Mbps		Up to 54Mbps
							Up to 11Mbps
		80 MHz			40 MHz		20 MHz
		20 MHz			40 MHz		20 MHz
TX POWER		MCS0: 28			MCS0/8: 26		6 Mbps: 26
		MCS9: 21			MCS7/15: 20		54 Mbps: 22
		MCS8: 25			MCS7/15: 21		1 Mbps: 26
							11 Mbps: 26
RX SENSITIVITY (BER=10 ⁻⁴)		MCS0: -89			MCS0/8: -88/90		6 Mbps: -93
		MCS9: -68			MCS7/15: -72/69		54 Mbps: -77
		MCS8: -74			MCS7/15: -74/72		1 Mbps: -93
							11 Mbps: -89
OTHER		Dynamic Channel Selection (DCS) based on interference detection			Automatic Channel Selection (ACS)		
		Dynamic Frequency Selection (DFS) based on radar signature					
		Automatic Transmit Power Control (ATPC) with EIRP limit support					
ANTENNA		Radio #1			Radio #2		
XP-10100-SUA		Two N-type Connectors with built-in Surge Protection			Two N-type Connectors with built-in Surge Protection		
XP-10150-BS1/SUR		Integrated 2x2 MIMO 22 dBi Dual Polarized 1 foot Antenna			Two N-type Connectors with built-in Surge Protection		
SECURITY		Radio #1			Radio #2		
ENCRYPTION		AES 128			802.11i/WPA2 Wireless Security with AES-128, TKIP or WEP		
AUTHENTICATION		Internal MAC Address Control List, Radius based Authentication			Enterprise (Radius based) or Pre-Shared Key		
802.1X SUPPORT					PEAP, LEAP, EAP-FAST, EAP-SIM, EAP-TTLS, EAP-AKA		
QoS		Radio #1			Radio #2		
		Asymmetric UL/DL committed and maximum information rate per service flow with Best Effort and Real Time Polling Services			802.11e/WMM Enhanced Distributed Channel Access		
Packet Classification Capabilities		802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType			802.1p priority, IPTOS		
THROUGHPUT		Radio #1			Radio #2		
		Up to 633 Mbps @ 80 MHz			Up to 150 Mbps		
MANAGEMENT							
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					
OTHER		Syslog, sFlow™ agent, SNTP and local time, Spectrum analyzer					
SYNCHRONIZATION							
		Pass-through IEEE 1588v2 Ethernet Synchronization					
NETWORK		Radio #1			Radio #2		
MODES		Bridging, Routing (RIP v2 and IP tunneling)			Access Point		
IP STACK		IPv4 and IPv6 simultaneously					
GATEWAY FEATURES		DHCP Server & relay, NAT with Std ALGs					
VLAN		802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode.					
		QinQ double tagging					
POWER		INPUT		OUTPUT			
		36 to 57 VDC via Ethernet port1 (PoE)		48 to 57 VDC – 25 Watt max on Ethernet port2 (PoE – software controlled)			
		12 VDC via Access port		12 VDC on Access port			
		Power should not be provided simultaneously on both ports.					
POWER CONSUMPTION							
		23 Watt typical					
ENVIRONMENTAL SPECS		OPERATING TEMP		STORAGE TEMP		HUMIDITY - IP RATING	
		-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		PACKAGED DIMENSIONS		UNPACKAGED DIMENSIONS		PACKAGED WEIGHT	
						UNPACKAGED WEIGHT	
XP-10100-SUA		14.56 x 13.0 x 7.87 in (370 x 331 x 200 mm)		9.84 x 8.66 x 2.83 in (250 x 220 x 72 mm)		10.91 lbs (4.95 kg)	
XP-10150-BS1/SUR		14.56 x 13.0 x 7.87 in (370 x 331 x 200 mm)		12 x 12 x 3.40 in (305 x 305 x 85 mm)		11.90 lbs (5.4 kg)	
						5.07 lbs (2.3 kg)	
						6.17 lbs (2.8 kg)	
SAFETY STANDARDS							
		UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -22)					
PACKAGE CONTENTS							
		• One Tsunami® XP-10100-SUA unit with four N-type surge protected connectors			• One Grounding kit		
		Or One Tsunami® XP-10150-BS1/SUR unit with integrated 22 dBi panel antenna plus two N-type surge protected connectors			• Two 2.4 GHz, 5 dBi omni antennas		
		• One power injector and country specific power cord			• One Antenna alignment (RJ11) dongle		
		• One Connector weatherproofing kit (Includes all recommended weatherproofing material)			• One Quick Installation Guide		
					• One Wall / Pole mounting kit		
MTBF and WARRANTY							
		>250 000 hours, 2-year warranty; ServPak Extended Support available.					