Multipoint 10100S

Product Snaphot

The most secure version of the Multipoint 10100 product family, the 10100S Series adds 256 Bit AES Encryption to meet the needs of military and other applications that require the best possible security. The model range includes several base station and subscriber units capable of throughput up to 672Mbps.

- AES 256 encryption and Radius authentication

- Radio mutual authentication eliminates unauthorized use of the system.

- Wide Band 4.9 + 5 GHz Radio

- 2×2 MIMO radio delivering up to 672 Mbps

- Advanced QoS for quad-play applications

- 20, 40, and 80 MHz channels.

Powered by WORP®

Proxim WORP enables the most efficient wireless broadband access possible in a packet-based network. Advanced QoS controls, committed interface rates, latency controls, IGMP snooping, and native multicast support allow granular service level management and the best video performance available in this product class.

Advanced Interference Management

Proxim ClearConnect™ combines multiple dynamic technologies and delivers the best interference management solution available.

Highly Secure

AES 256 Bit encryption with Radius-based authentication and secure management through SSL/ TLS1.2, SSH, and SNMPv3. The 10100S Series also uses a proprietary data encapsulation scheme that not only improves video and voice performance, but adds another layer of security.

Rugged Reliability

IP67 rated metal enclosure to ensure years of reliable service in harsh environments, including high winds, high salt, and temperature extremes.

Specifications

PRODUCT MODELS

MP-10100S-BSU-WD	Tsunami® MP 10100 Base Station, AES 256, 867 Mbps, MIMO 2x2, Type-N Connectors	PN: 901-00362
MP-10150S-BS9-WD	Tsunami® MP 10150 Base Station, AES 256, 867 Mbps, MIMO 2x2, 90° sector antenna	PN: 901-00363
MP-10100S-SUA-WD	Tsunami® MP 10100 Subscriber Unit, AES 256, 867 Mbps, MIMO 2x2, Type-N Connectors	PN: 901-00364
MP-10150S-SUR-WD	Tsunami® MP 10150 Subscriber Unit, AES 256, 867 Mbps, MIMO 2x2, 22 dBi panel antenna	PN: 901-00365

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	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
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 dBm	MCS0: 28 dBm	MCS0: 29 dBm
	MCS9: 21 dBm	MCS9: 22 dBm	MCS9: 25 dBm
RX SENSITIVITY (Per=10%)	MCS0: -89 dBm	MCS0: -93 dBm	MCS0: -94 dBm
	MCS9: -68 dBm	MCS9: -71 dBm	MCS9: -74 dBm
THROUGHPUT (RFC 2544)	Up to 674 Mbps	Up to 324 Mbps	Up to 137 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		

MANAGEMENT

REMOTE	Telnet and SSH, Web GUI and SSL/TLS, 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

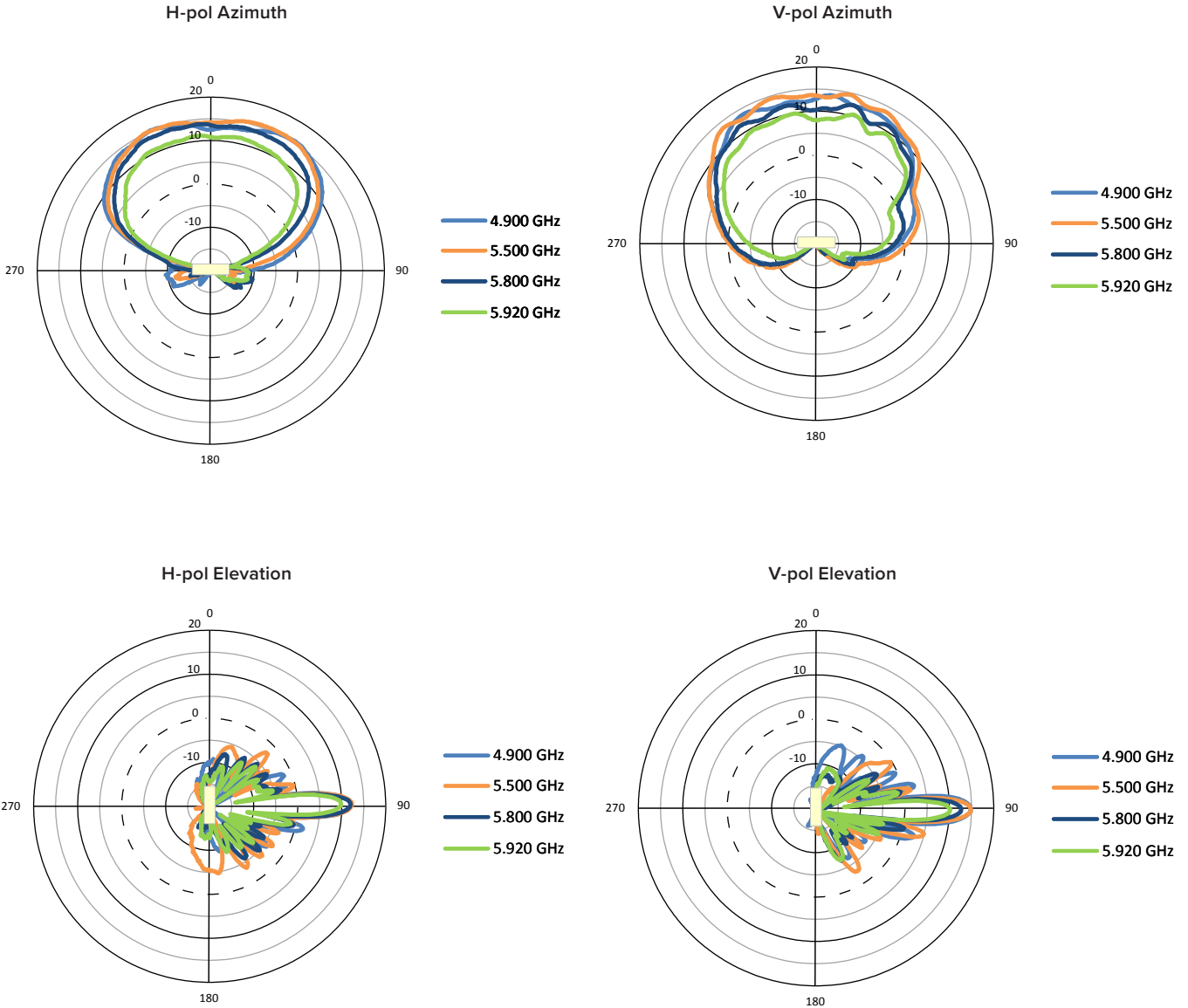|	Pass-trough SyncE and Precision Time Protocol (IEEE 1588v2) Ethernet Synchronization

SECURITY

ENCRYPTION	AES 128
AUTHENTICATION	Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)

ANTENNA

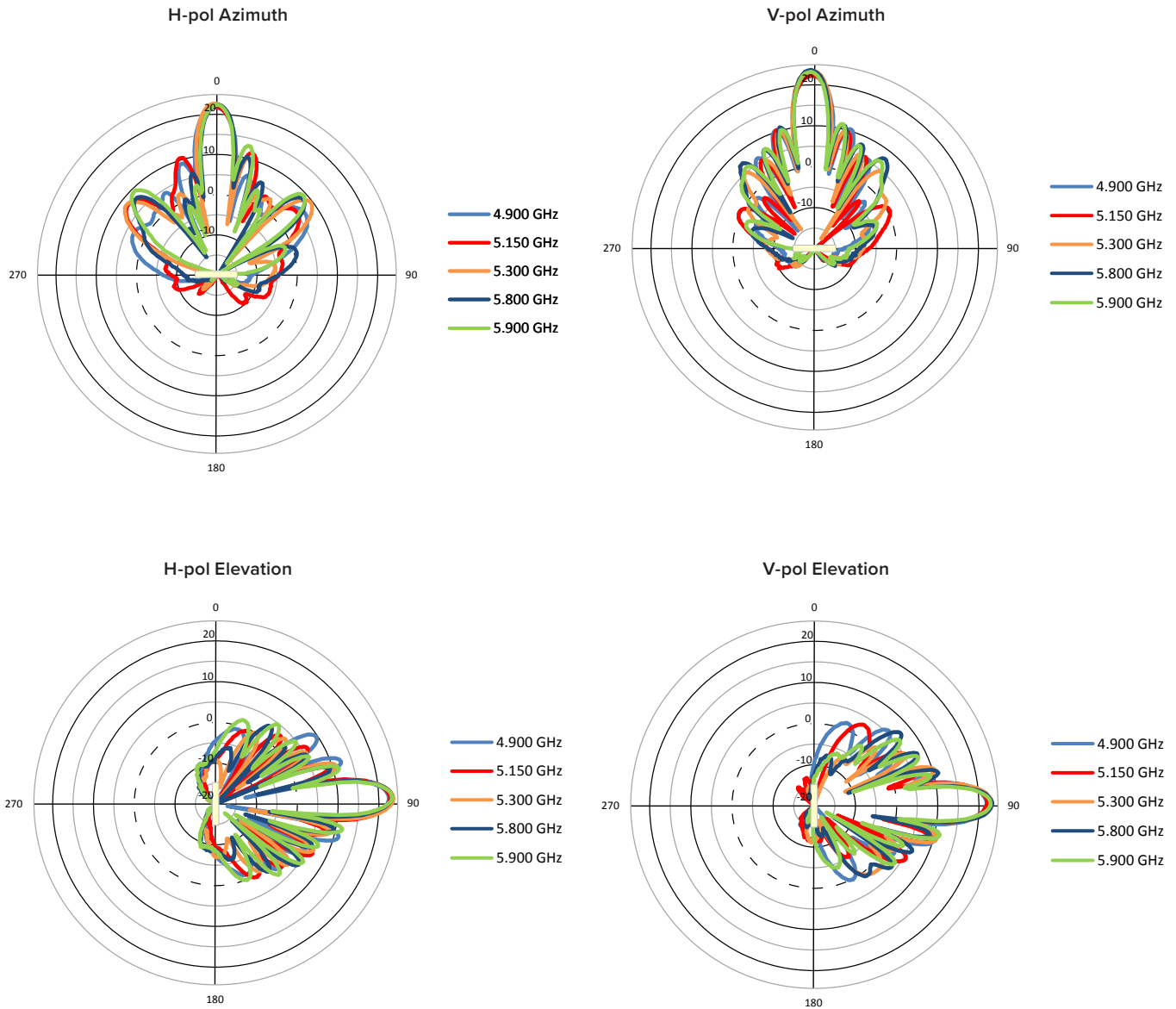| MP-10100S-BSU/SUA | Two N-type Connectors with built-in Surge Protection |
| MP-10150S-BS9 | Integrated 2x2 MIMO 16dBi Dual Polarized 90 degree Sector Antenna |
| MP-10150S-SUR | Integrated 2x2 MIMO 22dBi Dual Polarized 1 foot Panel Antenna |

ANTENNA PATTERNS (Sector Mode)

MP-10150S-BS9

H-pol Azimuth

V-pol Azimuth

H-pol Elevation

V-pol Elevation

ANTENNA PATTERNS (Sector Mode)

MP-10150S-SUR

H-pol Azimuth

- 4.900 GHz
- 5.150 GHz
- 5.300 GHz
- 5.800 GHz
- 5.900 GHz

V-pol Azimuth

- 4.900 GHz
- 5.150 GHz
- 5.300 GHz
- 5.800 GHz
- 5.900 GHz

H-pol Elevation

- 4.900 GHz
- 5.150 GHz
- 5.300 GHz
- 5.800 GHz
- 5.900 GHz

V-pol Elevation

- 4.900 GHz
- 5.150 GHz
- 5.300 GHz
- 5.800 GHz
- 5.900 GHz

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 56 VDC via Ethernet port1 (Power over Ethernet) 12 VDC via Access port Power should not be provided simultaneously on both ports	48 to 56 VDC – 25 Watt on Ethernet port2 (PoE – software controlled) 12 VDC on Access port

POWER CONSUMPTION

14 Watt typical, 17.5 Watt maximum

ENVIRONMENTAL SPECS	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY - IP RATING	WIND LOADING
	-40º to 60ºC (-40º to 140º Fahrenheit)	-50º to 70ºC (-58º to 158º Fahrenheit)	100% relative humidity - IP67	200 km/h (125 Mph)
PHYSICAL SPECS	DIMENSIONS PACKAGED	DIMENSIONS NPACKAGED	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
MP-10100S-BSU/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)	9.92 lbs (4.5 kg)	4.20 lbs (1.9 kg)
MP-10150S-BS9	18.46 x 7.05 x 21.57 in (469 x 179 x 548 mm)	14 x 14 x 3.40 in (370 x 370 x 85 mm)	13.67 lbs (6.2 kg)	7.27 lbs (3.3 kg)
MP-10150S-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)	10.91 lbs (4.95 kg)	5.30 lbs (2.4 kg)

SAFETY STANDARDS

IEC 62368-1:2016 & 60950-22:2016

UL 62368-1 2nd edition & 60950-22 2nd edition

CAN/CSA C22.2 No 62368-1:14 & No 60950-22:17

EN 62368-1:2014 + A11:2017 & 60950-22:2017

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

- One Tsunami® MP-10100S-BSU/SUA with two N-type surge protected connectors
  Or One Tsunami® MP-10150S-BS9/SUR with integrated dual polarized antenna
- One power injector and country specific power cord
- One Connector weatherproofing kit (Includes all recommended weatherproofing material)
- One Wall / Pole mounting kit
- One Antenna alignment (RJ11) dongle
- One Grounding kit
- One Quick Installation Guide

MTBF & WARRANTY

>250 000 hours, 2-year warranty, ServPak Extended Support available.

ABOUT PROXIM WIRELESS:

Proxim Wireless is a global leader in advanced wireless broadband and WiFi solutions that deliver high performance and high availability communications. Celebrating 40 years of pioneering wireless solutions, Proxim is recognized for unparalleled reliability, superior performance, and drive for innovation.