Enhance wireless security with Multipoint 10100S series built in AES 256 capability

The Multipoint 10100S is an extremely secure version of the Multipoint 10100, a very high throughput, high power, especially reliable and cost-effective, near-line-of-sight point-to-multipoint wireless solution.

World Class Performance

- Point-to-Multipoint system that delivers up to 866 Mbps data rate and covers distances up to 10 miles (16 km).
- Dual IPv4 and IPv6 stacks for transparent evolution to tomorrow’s networks.
- Triple level login with monitoring, simplified or advanced web interfaces.
- 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

- 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 conditions.
- Spectrum analyzer to analyze frequency bands for interference, and select the best available channel.

Carrier-Grade Solution

- Implements AES 256 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 frames.

Key Technologies

The Multipoint 10100S supports the following features that make it ideal for video surveillance, Government or mobility applications that need ultra-secure very high-speed broadband wireless access:

**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).
Multipoint 10100S Series

Rugged and Reliable

Designed for harsh environments, the Multipoint 10100S is fully IP67 rated, and will deliver years of reliable service in conditions that include, high winds, high salt, and high temperature extremes.

Product Line Compatibility

- Connects to all existing MP-10200, MP-10100, MP-10100L, MP-8200, MP-820 and MP-830 products.
- Fully integrates within ProximVision® Advanced Cloud Based Carrier Management System and Controller.

Multi-Language Support

Web Interface available in English, French, Spanish and Chinese

Specifications

<table>
<thead>
<tr>
<th>PRODUCT MODELS</th>
<th>PART NUMBERS</th>
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<tbody>
<tr>
<td>MP-10100S-BSU-US</td>
<td>901-00294 MP-10100S-BSU-US</td>
</tr>
<tr>
<td>MP-10150S-BS9-US</td>
<td>901-00296 MP-10150S-BS9-US</td>
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<tr>
<td>MP-10100S-SUA-US</td>
<td>901-00295 MP-10100S-SUA-US</td>
</tr>
<tr>
<td>MP-10150S-SUR-US</td>
<td>901-00297 MP-10150S-SUR-US</td>
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</tbody>
</table>

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
- 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

<table>
<thead>
<tr>
<th>RF Band</th>
<th>TX Power (dual RF)</th>
<th>RX Sensitivity (Per=10%)</th>
<th>Throughput (RFC 2544)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 MHz</td>
<td>MCS0: 28</td>
<td>MCS0: -89</td>
<td>Up to 672 Mbps</td>
<td>Dynamic Channel Selection (DCS) based on interference detection, Dynamic Frequency Selection (DFS) based on radar signature</td>
</tr>
<tr>
<td>40 MHz</td>
<td>MCS9: 21</td>
<td>MCS0: -93</td>
<td>Up to 324 Mbps</td>
<td>Automatic Transmit Power Control (ATPC) with EIRP limit support</td>
</tr>
<tr>
<td>20 MHz</td>
<td>MCS9: 68</td>
<td>MCS9: -71</td>
<td>Up to 137 Mbps</td>
<td></td>
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</tbody>
</table>

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

MANAGEMENT

- Remote: Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3
- 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 and AES 256

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

QoS

Asymmetric Bandwidth Control
Packet Classification
Capabilities
Scheduling
Asymmetric UL/DL committed and maximum information rate per service flow
802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType
Best Effort, Real Time Polling Services

NETWORK

MODES
Bridging, Routing (RIP v2 and IP tunneling)
IPv4 and IPv6 simultaneously
DHCP Server & relay, NAT with Std ALGs, PPPoE end point with Proxy DNS
802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging

IP STACK

GATEWAY FEATURES

VLAN

POWER

INPUT
36 to 57 VDC via Ethernet port1 (Power over Ethernet)
12 VDC via Access port

OUTPUT
48 to 57 VDC – 25 Watt on Ethernet port2 (PoE – software controlled)
12 VDC on Access port

Power should not be provided simultaneously on both ports

POWER CONSUMPTION

14 Watt typical, 17.5 Watt maximum

ENVIRONMENTAL SPECS

OPERATING TEMPERATURE
-40º to 60ºC
(-40º to 140º Fahrenheit)

STORAGE TEMPERATURE
-50º to 70ºC
(-58º to 158º Fahrenheit)

HUMIDITY - IP RATING
100% relative humidity - IP67

WIND LOADING
200 km/h (125 mph)

PHYSICAL SPECS

DIMENSIONS PACKAGED
MP-10100S-BSU/SUA
14.56 x 13.0 x 7.87 in
(370 x 331 x 200 mm)

MP-10150S-BS9
18.46 x 7.05 x 21.57 in
(469 x 179 x 548 mm)

MP-10150S-SUR
14.56 x 13.0 x 7.87 in
(370 x 331 x 200 mm)

DIMENSIONS UNPACKAGED
MP-10100S-BSU/SUA
9.84 x 8.66 x 2.83 in
(250 x 220 x 72 mm)

MP-10150S-BS9
14 x 14 x 3.40 in
(370 x 370 x 85 mm)

MP-10150S-SUR
12 x 12 x 3.40 in
(305 x 305 x 85 mm)

WEIGHT (PACKAGED)
MP-10100S-BSU/SUA
9.92 lbs (4.5 kg)

MP-10150S-BS9
13.67 lbs (6.2 kg)

MP-10150S-SUR
10.91 lbs (4.95 kg)

WEIGHT (UNPACKAGED)
MP-10100S-BSU/SUA
4.20 lbs (1.9 kg)

MP-10150S-BS9
7.27 lbs (3.3 kg)

MP-10150S-SUR
5.30 lbs (2.4 kg)

SAFETY STANDARDS

UL 60950, IEC 60950 (part -1 and -22)

CERTIFICATIONS

USA: FCC 90Y + 15E (UNII 15.247)
Railway: EN 50155 + EN 50121 + EN 61000-6-4 + EN 61373 + EN 45545-2

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

MTBF over 250 000 hours & 2-year warranty with ServPak Extended Support available.