



## 旨在提供超过630 Mbps的数据处理量

Multipoint-10100产品系列是集高处理量、可靠、经济高效、近距离点对多点于一体的一系列无线产品。Multipoint-10100系列支持以下功能，这些功能使其成为需要超强的网络高速连接作为最后一英里接入、视频监控或移动应用的理想选择。

## 世界级性能

- 点对多点系统，可提供高达866 Mbps的数据速率，覆盖距离可达10英里 (16 km)
- IPv4和IPv6双协议栈，在未察觉的情况下演变成未来的网络
- 具有监控，简化或高级Web界面的三级登录。
- 内置功能丰富的网络协议，用于桥接，路由和网关功能
- 铁路认证的高速移动速度高达185 mph (295 km/h)

## 频率不可知

- 可在4.900至5.925 GHz的免许可频段内运行
- 灵活的RF规划，信道规格为20、40和80 MHz

## 近视距和高级功能

- 具有双千兆以太网端口，PoE输出可为其他设备，如监控摄像头或其他无线电设备供电
- 执行深度数据包检查 (DPI) 以创建独特和复杂的服务规则，轻松分层服务级别
- BSU冗余 (500毫秒切换时间) 和动态信道选择，无论什么条件都能确保服务的连续性
- 内置频谱分析仪可分析干扰频段，并选择最佳可用频道

## 实现技术

### Proxim WORP<sup>®</sup>

-结合网络访问控制、数据调度排队、高级QoS和加密，以确保高效和安全的数据传输。

### Proxim ClearConnect<sup>™</sup>

一套确保在高密度无线部署中进行稳定和可靠通信的干扰缓解技术。

### Proxim FastConnect<sup>™</sup>

移动技术在固定基站和移动车辆之间提供快速切换，以确保不间断的宽带接入，支持速度达到295公里/小时 (185英里/小时)

## 运营商级回程

- 为未许可的频谱中最安全的室外无线通信实施AES加密和远程认证拨入用户服务身份验证
- 利用Proxim的无线室外路由协议 (WORP<sup>®</sup>) 来防止窥探，并通过SSL/TLS1.2, SSH和SNMPv3实现高度安全的远程管理
- 具有以太网端口，直通IEEE 1588v2同步功能，支持9k巨型帧

## 强大且可靠

Tsunami<sup>®</sup> MP-10100专为恶劣环境而设计，完全符合IP67防护等级，可在大风，高盐和高温极端条件下提供多年可靠的服务。

## 产品系列的兼容性

- 连接所有现有的Tsunami<sup>®</sup> MP-10200, MP-10100, MP-8200, MP-820和MP-830产品
- 完美集成在ProximVision<sup>®</sup>高级云端运营商管理系统和控制器中

## 多语言支持

Web界面提供英语，法语，西班牙语和中文

## 关于Proxim Wireless

Proxim Wireless是全球先进的Wi-Fi、点对点、点对多点户外无线系统的先驱和领头羊，该系统用于建立关重要任务和高度可用性通信。

Proxim公司拥有超过30年的无线电方面的经验，以其无与伦比的可靠性，卓越的性能和创新动力而闻名。

## 规格

| PRODUCT MODELS               |  | PART NUMBERS   |                 |
|------------------------------|--|----------------|-----------------|
| MP-10100-BSU                 | Tsunami® MP 10100 Base Station, 866 Mbps, MIMO 2x2, Type-N Connectors  | 901-00226      | MP-10100-BSU-US |
| MP-10150-BS9                 | Tsunami® MP 10150 Base Station, 866 Mbps, MIMO 2x2, 90° sector antenna   | 901-00227      | MP-10100-BSU-WD |
| MP-10150-BS1                 | Tsunami® MP 10150 Base Station, 866 Mbps, MIMO 2x2, 22 dBi panel antenna   | 901-00230      | MP-10150-BS9-US |
| MP-10100-SUA                 | Tsunami® MP 10100 Subscriber Unit, 866 Mbps, MIMO 2x2, Type-N Connectors   | 901-00231      | MP-10150-BS9-WD |
| MP-10150-SUR                 | Tsunami® MP 10150 Subscriber Unit, 866 Mbps, MIMO 2x2, 22 dBi panel antenna  | 901-00260      | MP-10150-BS1-US |
| MP-10150-SUL                 | Tsunami® MP 10150 Subscriber Unit Long-range, 866 Mbps, MIMO 2x2, 28 dBi panel antenna   | 901-00261      | MP-10150-BS1-WD |
|                              |  | 901-00228      | MP-10100-SUA-US |
|                              |  | 901-00229      | MP-10100-SUA-WD |
|                              |  | 901-00232      | MP-10150-SUR-US |
|                              |  | 901-00233      | MP-10150-SUR-WD |
|                              |  | 901-00234      | MP-10150-SUL-US |
|                              |  | 901-00235      | MP-10150-SUL-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            | 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 dBm   | MCS0: 28 dBm   | MCS0: 29 dBm    |
|                              | MCS9: 21 dBm   | MCS9: 22 dBm   | MCS8: 25 dBm    |
| RX SENSITIVITY (Per=10%)     | MCS0: -89 dBm  | MCS0: -93 dBm  | MCS0: -94 dBm   |
|                              | MCS9: -68 dBm  | MCS9: -71 dBm  | MCS8: -74 dBm   |
| THROUGHPUT (RFC 2544)        | Up to 672 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<br>Automatic Transmit Power Control (ATPC) with EIRP limit support |                |                 |
| ANTENNA                      |  |                |                 |
| MP-10100-BSU/SUA             | Two N-type Connectors with built-in Surge Protection   |                |                 |
| MP-10150-BS9                 | Integrated 2x2 MIMO 16dBi Dual Polarized 90 degree Sector Antenna  |                |                 |
| MP-10150-BS1/SUR             | Integrated 2x2 MIMO 22dBi Dual Polarized 1 foot Panel Antenna  |                |                 |
| MP-10150-SUL                 | Integrated 2x2 MIMO 28dBi Dual Polarized 2 feet Panel Antenna  |                |                 |
| 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 Chinese, English, French and Spanish  |                |                 |
| 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 port1 (Power over Ethernet)<br>12 VDC via Access port<br>Power should not be provided simultaneously on both ports  |   | 48 to 57 VDC – 25 Watt on Ethernet port2<br>(PoE – software controlled)<br>12 VDC on Access port |   |
| <b>POWER CONSUMPTION</b>   |   |   |  |   |
|                            | 14 Watt typical, 17.5 Watt maximum  |   |  |   |
| ENVIRONMENTAL SPECS        | OPERATING TEMPERATURE   | STORAGE TEMPERATURE                             | HUMIDITY - IP RATING   | WIND LOADING  |
|                            | -40° to 60°C<br>(-40° to 140° Fahrenheit)   | -50° to 70°C<br>(-58° to 158° Fahrenheit)       | 100% relative humidity - IP67  | 200 km/h (125 mph) except<br>MP-10150-SUL:180 km/h(112.5 mph) |
| PHYSICAL SPECS             | DIMENSIONS PACKAGED   | DIMENSIONS UNPACKAGED                           | WEIGHT (PACKAGED)  | WEIGHT (UNPACKAGED)   |
| MP-10100-BSU/SUA           | 14.56 x 13.0 x 7.87 in<br>(370 x 331 x 200 mm)  | 9.84 x 8.66 x 2.83 in<br>(250 x 220 x 72 mm)    | 9.92 lbs (4.5 kg)  | 4.20 lbs (1.9 kg)   |
| MP-10150-BS9               | 18.46 x 7.05 x 21.57 in<br>(469 x 179 x 548 mm)   | 14.57 x 14.57 x 4.21 in<br>(370 x 370 x 107 mm) | 13.67 lbs (6.2 kg)   | 7.27 lbs (3.3 kg)   |
| MP-10150-BS1/SUR           | 14.56 x 13.0 x 7.87 in<br>(370 x 331 x 200 mm)  | 12 x 12 x 3.40 in<br>(305 x 305 x 85 mm)        | 10.91 lbs (4.95 kg)  | 5.30 lbs (2.4 kg)   |
| MP-10150-SUL               | 27.55 x 6.85 x 27.55 in<br>(700 x 174 x 700 mm)   | 23.62 x 23.62 x 3.85 in<br>(600 x 600 x 92 mm)  | 23.15 lbs (10.5 kg)  | 14.33 lbs (6.5 kg)  |
| <b>SAFETY STANDARDS</b>    |   |   |  |   |
|                            | UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -22)  |   |  |   |
| <b>CERTIFICATIONS</b>      |   |   |  |   |
|                            | USA: FCC 90Y + 15E (UNII 15.247),<br>Canada: IC RSS 102 + RSS 111 + RSS 247,<br>Europe: RED EN 301 489-1 + EN 301-489-17 + EN 301 893 + EN 302 502,<br>Railway: EN 50155 + EN 50121 + EN 61373  |   |  |   |
| <b>PACKAGE CONTENTS</b>    |   |   |  |   |
|                            | <ul style="list-style-type: none"> <li>One Tsunami® MP-10100-BSU/SUA with two N-type surge protected connectors<br/>Or One Tsunami® MP-10150-BS9/BS1/SUR/SUL with integrated dual polarized antenna</li> <li>One power injector and country specific power cord</li> <li>One Connector weatherproofing kit (Includes all recommended weatherproofing material)</li> <li>One Wall / Pole mounting kit</li> <li>One Antenna alignment (RJ11) dongle</li> <li>One Grounding kit</li> <li>One Quick Installation Guide</li> </ul> |   |  |   |
| <b>MTBF &amp; WARRANTY</b> |   |   |  |   |
|                            | MTBF over 250 000 hours & 2-year warranty with ServPak Extended Support available.  |   |  |   |