



## 超强的室外点对多点CPE, 适用于最后一英里接入和移动应用

Tsunami<sup>®</sup> MultiPoint835 CPE是大规模无线部署理想的解决方案, 为规划无线宽带最后一英里接入部署的WISP提供了极具价值的提案。

MP-835-CPE可在高达295 km/h (185 mph) 的速度上实现无缝漫游, 用于移动应用, 例如在火车, 有轨电车和公共汽车上提供互联网接入或视频监控。

此CPE还具有运营高级优先级平台, 支持多种服务类别, 能够优先处理语音, 视频和数据应用程序, 以实现客户服务功能的精细化管理。

## 价值高, 使用寿命长

高可靠性, 免许可证频段和与过去, 现在和未来的Proxim基站型号兼容集于一体, 确保其较长的使用寿命和良好的投资回报。

- Tsunami<sup>®</sup> MP-835-CPE专为恶劣环境而设计, 完全符合IP67防护等级, 可在大风, 高盐和高温环境中提供多年可靠的服务

## 灵活、快速和安全

- 允许灵活的服务层带宽分配
- 现场可升级10、25、50或100 Mbps的数据处理量, 最大数据速率可达300 Mbps
- 提供灵活的信道规划, 支持4.900 - 5.000 GHz (L模板) 和5.150 - 5.925 GHz
- 配备2x2 MIMO高功率无线通信, 发射功率为26 dBm
- 通过AES-128高级加密保护无线传输
- 使用Proxim的无线室外路由协议 (WORP<sup>®</sup>) 来防止窥探
- 无线电相互认证消除了恶意用户单元对系统的未授权使用和中间人的攻击
- 支持WORP<sup>®</sup>或WORP<sup>®</sup>同步, 以适应射频条件并提供最佳性能。

## 一体化的CPE和网关

- 用于桥接, 路由和网关功能的内置网络协议
- MAC, 以太网类型, IP地址包过滤提供精细的网络安全性
- 通过SSL, SSH和SNMPv3实现高度安全的远程管理

## 安装方便

- 随时可以安装一个完整的“自带杆”安装套件: 其中包括基本的杆式安装和接地套件, 连接器防风雨套件和馈电器
- 高级正交频分复用技术 (OFDM) 提供的非视距功能以及2x2 MIMO可轻松部署在一些具有挑战性的领域
- 部署工具包括频谱分析仪, 天线对准和远程管理配置
- 15 dBi集成天线
- 连接所有现有的Tsunami<sup>®</sup> MP.11 5054, Tsunami<sup>®</sup> 8100和Tsunami<sup>®</sup> 8200产品, 也适用于所有新的Tsunami 10100和10200系列产品

## 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™

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™

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)

## 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-835-CPE-10	Tsunami® MP 835 Customer Premise Equipment, 10 Mbps, MIMO 2x2, 15 dBi integrated antenna	901-00203	MP-835-CPE-10-US			
MP-835-CPE-25	Tsunami® MP 835 Customer Premise Equipment, 25 Mbps, MIMO 2x2, 15 dBi integrated antenna	901-00206	MP-835-CPE-10-WD			
MP-835-CPE-50	Tsunami® MP 835 Customer Premise Equipment, 50 Mbps, MIMO 2x2, 15 dBi integrated antenna	901-00204	MP-835-CPE-25-US			
MP-835-CPE-100	Tsunami® MP 835 Customer Premise Equipment, 100 Mbps, MIMO 2x2, 15 dBi integrated antenna	901-00207	MP-835-CPE-25-WD			
MP-835-CPE-10-25-UPG	Tsunami® MP 835 Customer Premise Equipment, 10 to 25 Mbps license upgrade	901-00201	MP-835-CPE-50-WD			
MP-835-CPE-10-50-UPG	Tsunami® MP 835 Customer Premise Equipment, 10 to 50 Mbps license upgrade	901-00208	MP-835-CPE-100-WD			
MP-835-CPE-10-100-UPG	Tsunami® MP 835 Customer Premise Equipment, 10 to 100 Mbps license upgrade	997-00016	MP-835-CPE-10-25-UPG			
MP-835-CPE-25-50-UPG	Tsunami® MP 835 Customer Premise Equipment, 25 to 50 Mbps license upgrade	997-00017	MP-835-CPE-10-50-UPG			
MP-835-CPE-25-100-UPG	Tsunami® MP 835 Customer Premise Equipment, 25 to 100 Mbps license upgrade	997-00018	MP-835-CPE-10-100-UPG			
MP-835-CPE-50-100-UPG	Tsunami® MP 835 Customer Premise Equipment, 50 to 100 Mbps license upgrade	997-00019	MP-835-CPE-25-50-UPG			
		997-00020	MP-835-CPE-25-100-UPG			
		997-00021	MP-835-CPE-50-100-UPG			
INTERFACES						
WIRED ETHERNET	One auto MDI-X RJ45 10/100 Mbps Ethernet with PoE in					
WIRELESS PROTOCOL	WORP® (Wireless Outdoor Router Protocol) or WORP sync					
RADIO & TX SPECS						
MIMO	2x2 MIMO					
MODULATION	OFDM with BPSK, QPSK, QAM16, QAM64					
FREQUENCY	4.900 - 5.925 GHz (Subject to Country Regulations)					
CHANNEL SIZE	40 MHz, 20 MHz, 10 MHz*, 5 MHz* channel bandwidths					
DATA RATE	MCS 0 to 15 for High Throughput mode (6.5 – 300 Mbps) with Dynamic Data Rate Selection. BPSK, QPSK, 16-QAM and 64-QAM for legacy mode (6Mbps - 54Mbps)					
TX POWER	Up to 26 dBm (dual chain)					
TX POWER CONTROL	0 – 15 dB, in 0.5 dB steps. Automatic TPC with configurable EIRP limit					
	<b>Channel Size</b>	<b>40 MHz</b>	<b>20 MHz</b>	<b>10 MHz</b>	<b>5 MHz</b>	
TX POWER	MCS 0	-88 dBm	-92 dBm	-93 dBm	-94 dBm	
	MCS 7	-72 dBm	-74 dBm	-75 dBm	-77 dBm	
RX SENSITIVITY (Per=10%)	MCS 8	-88 dBm	-91 dBm	-93 dBm	-94 dBm	
	MCS 15	-69 dBm	-71 dBm	-72 dBm	-75 dBm	
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						
	Integrated 15 dBi dual Polarized (H+V) panel antenna (12 dBi before 5.000 GHz and 14 dBi beyond 5.850 GHz)					
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					
SECURITY						
ENCRYPTION	AES-CCM 128 bits					
AUTHENTICATION	Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)					
QoS						
Asymmetric Bandwidth Control	Uplink and Downlink CIR Control "committed information rate" per service flow Uplink and Downlink MIR Control "maximum information rate" per service flow					
Packet Classification Capabilities	802.1D/802.1Q/802.1p priority, IPTOS, VLAN ID, IP source/destination address, source/destination port, Ethernet source/destination address, IP protocol, and Ethertype					
Scheduling	Best Effort, Real Time Polling Services					
NETWORK						
MODES	Bridging, Routing (RIP v2 and IP tunneling)					
THROUGHPUT	MP-835-CPE-10	Up to 10 Mbps				
	MP-835-CPE-25	Up to 25 Mbps				
	MP-835-CPE-50	Up to 50 Mbps				
	MP-835-CPE-100	Up to 100 Mbps				
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 CONSUMPTION				
	6 Watt typical			
ENVIRONMENTAL SPECS	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY - IP RATING	WIND LOADING
	-30° to 50°C (-22° to 122° Fahrenheit) Cold start at -20°C (-4° Fahrenheit)	-55° to 70°C (-67° to 158° Fahrenheit)	Max 100% relative humidity (non-condensing) - IP67	180 km/h (112 mph)
PHYSICAL SPECS	DIMENSIONS PACKAGED	DIMENSIONS UNPACKAGED	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
	13.97 x 8.86 x 3.46 in (355 x 225 x 88 mm)	4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm)	4.9 lbs (2.225 Kg)	2.1 lbs (0.950 kg)
SAFETY STANDARDS				
	UL 60950-1/22			
PACKAGE CONTENTS				
	<ul style="list-style-type: none"> <li>• One Tsunami® MP-835-CPE-10/25/50/100 with integrated antenna</li> <li>• One 20 W power injector and country specific power cord</li> <li>• One Connector weatherproofing kit (Includes all recommended weatherproofing material)</li> <li>• One Grounding kit</li> <li>• One basic Pole mounting kit</li> <li>• One Quick Installation Guide</li> </ul>			
MTBF & WARRANTY				
	> 350,000 hours & 1-year; ServPak Extended Support available.			