The compact and robust form factor of Tsunami® Multipoint 820 series is an ideal solution for urban wireless deployments. It is eminently suitable discrete mounting in city streets and offers high reliability for the connection of Video Surveillance, traffic monitoring and traffic light management systems.

The Tsunami® Multipoint 820 series is also adapted for in vehicle mounting and supports transparent roaming for data on the move.

High Performance

- Designed with a high 26 dBm power transmitter, and 2x2 MIMO technology, the 820 delivers excellent connectivity even in difficult conditions.
- The Non Line of Sight (NLOS) performance of the 820 series enables installation in challenging environments.

Compact, Quick and Easy to Install

Though designed in a small form factor, the 820 packs quite a punch and Comes ready to install with a complete "bring-your-own-pole" installation kit that includes basic pole mount and grounding kits, connector weather proofing kit and a power injector, The on board signal strength indicator that makes installations really easy and hassle free.

Mobility

The Multipoint 820 Series, with the help of Proxim's roaming technology - FastConnect, is able to establish unparalleled handoff times and support delay-sensitive multimedia applications even when mobile at speeds of up to 285 km/h (196 mph).

Built for Extremes

The 820 aluminum enclosures is approved after stringent screening involving Drop, Shock, Salt Spray, Thermal, and Reliability tests. In addition, the enclosures is IP 67 rated that ensures the 820 delivers high performance even in hostile weather conditions with minimal downtime.

Powered by WORP®

At the core of every Tsunami® 820 lies Proxim's proprietary Wireless Outdoor Routing Protocol - WORP®, which is a reliable, secure and efficient protocol that optimizes the performance of multi-play outdoor wireless Point-to-Point and Point-to-Multipoint links.

Compatibility

Connects to all Tsunami® MP-10200, MP10100, MP-8200, MP-820 and MP-830 product families.

About Proxim Wireless

Proxim Wireless is a pioneer and global leader in advanced Wi-Fi, point to point, and point to multipoint outdoor wireless systems that deliver high performance and high availability communications.

With over 30 years of wireless experience, Proxim is recognized for its unparalleled reliability, superior performance and drive for innovation.

Specifications

PRODUCT MODELS		PART NUMBERS
MP-820-BSU-100	Tsunami® MP 820 Base Station Unit, 100 Mbps, MIMO 2x2, N-Type Connectors	901-00135 MP-820-BSU-100-US 901-00133 MP-820-BSU-100-WD
MP-825-BS3-100	Tsunami® MP 825 Base Station Unit, 100 Mbps, MIMO 2x2, 15 dBi Antenna	901-00185 MP-825-BS3-100-US 901-00184 MP-825-BS3-100-WD
MP-820-SUA-50+	Tsunami® MP 820 Subscriber Unit, 50 Mbps (upgradable to 100 Mbps), MIMO 2x2, N-Type Connectors	901-00136 MP-820-SUA-50+-US 901-00134 MP-820-SUA-50+-WD
MP-820-SUA-100	Tsunami® MP 820 Subscriber Unit, 100 Mbps, MIMO 2x2, N-Type Connectors	901-00174 MP-820-SUA-100-US 901-00173 MP-820-SUA-100-WD
MP-825-SUR-50+	Tsunami® MP 825 Subscriber Unit, 50 Mbps (upgradable to 100 Mbps), MIMO 2x2, 15 dBi Antenna	901-00176 MP-825-SUR-50+-US 901-00175 MP-825-SUR-50+-WD
MP-825-SUR-100	Tsunami® MP 825 Subscriber Unit, 100 Mbps, MIMO 2x2, 15 dBi Antenna	901-00195 MP-825-SUR-100-US 901-00212 MP-825-SUR-100-WD

INTERFACES

WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000Mbps Ethernet with PoE in
WIRELESS PROTOCOL	WORP® (Wireless Outdoor Router Protocol) or WORP sync

RADIO & TX SPECS

MIMO	2x2:2
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 * DFS availability is country dependent, check the User Guide
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

	Channel Size	40 MHz	20 MHz	10 MHz	5 MHz
RX SENSITIVITY (PER=10%)	MCS 0	-88 dBm	-92 dBm	-93 dBm	-94 dBm
	MCS 7	-72 dBm	-74 dBm	-75 dBm	-77 dBm
	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

MP-820-BSU-100/SUA-50+/SUA-100	Two N-type connectors
MP-825-BS3-100/SUR-50+/SUR-100	Integrated 15 dBi dual Polarized (H+V) panel antenna (12 dBi before 5.000 GHz and 14 dBi beyond 5.850 GHz)

MANAGEMENT

LOCAL	RS-232 serial (RJ11 to DB-9 dongle provided)
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

	Synchronize internal clock to Pulse Per Second signal recieved from either GPS module connected to RJ11 serial port or Ethernet Synchronization module connected to RJ45 ethernet port

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 protocol, IP source/destination address, Ethernet source/destination address, source/destination port, and Ethertype
Scheduling	Best Effort, Real Time Polling Services

NETWORK		
MODES IP STACK THROUGHPUT	Bridging, Routing (RIP v2 and IP tunneling) IPv4 and IPv6 simultaneously	
	MP-820-BSU-100/SUA-100 MP-825-BS3-100/SUR-100	Up to 100 Mbps, 32 subscriber max
	MP-820-SUA-50+ or MP-825-SUR-50+	Up to 50 Mbps (license upgradable to 100 Mbps)
GATEWAY FEATURES VLAN	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	

POWER SUPPPLY
Via provided PoE injector or directly from 12 VDC source through serial port

POWER CONSUMPTION
6 Watt typical (15 Watt max)

ENVIRONMENTAL SPECS	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY - IP RATING	WIND LOADING
	-40º to 55ºC (-40º to 131º Fahrenheit)	-55º to 70ºC (-67º to 158º Fahrenheit)	Max 100% relative humidity (non-condensing) - IP67	180 km/h (112 mph)

PHYSICAL SPECS	DIMENSIONS PACKAGED	DIMENSIONS UNPACKAGED	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
MP-820-BSU-100/SUA-50+/ SUA-100	11.81x10.83x5.31 in (300x275x135 mm)	5.02x8.68x2.85 in (127.5x220.5x72.5 mm)	7.93 lbs (2.7 kg)	2.75 lbs (1.250 kg)
MP-825-BS3-100/SUR-50+/ SUR-100	11.81x10.83x5.31 in (300x275x135 mm)	4.96x8.62x2.58 in (126x219x65.5 mm)	7.27 lbs (3.3 Kg)	2.10 lbs (0.950 kg)

SAFETY STANDARDS
UL 60950-1/22, CAN/CSA-C22.2 No. 60950-1/22, IEC 60950-1/22, EN 60950-1/22

PACKAGE CONTENTS

• One Tsunami® MP-820-BSU-100 with two N-type surge protected connectors
   Or One Tsunami® MP-825-BS3-100 with 15 dBi integrated antenna
   Or One Tsunami® MP-820-SUA-50+/SUA-100 with two N-type surge protected connectors
   Or One Tsunami® MP-825-SUR-50+/SUR-100 with 15 dBi integrated antenna
• One 32 W power injector with country specific power cord
• One Wall / Pole mounting kit (Tsunami MP-825-BS3/SUR)
   Or One Pole mounting Kit (Tsunami MP-820-BSU/SUA)
• One Connector weatherproofing kit (Includes all recommended weatherproofing material)
• One Serial (RJ-11 to DB9) dongle
• One Grounding kit
• One Quick Installation Guide

MTBF & WARRANTY
MTBF over 350,000 hours & 2-year warranty with ServPak Extended Support available