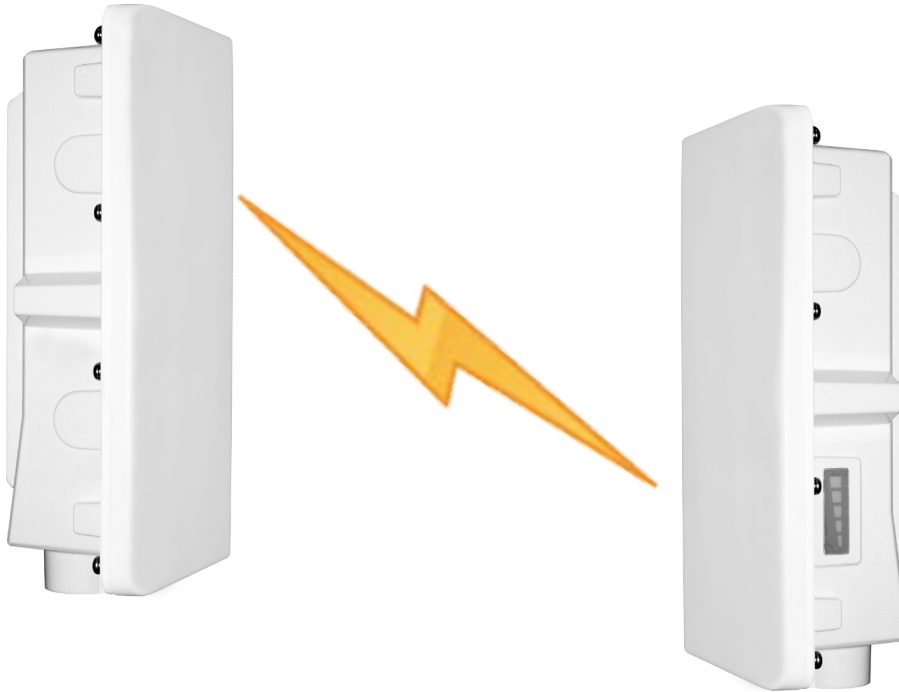


Tsunami Quickbridge® 820

Compact Integrated Antenna Wireless Bridge Bundle with 50 & 100 Mbps Options



Compact integrated antenna backhaul solution delivers 50 and 100 Mbps throughput options.

The compact and robust form factor of Tsunami Quickbridge® 820 is an ideal solution for urban wireless backhaul. 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.

With excellent spectrum efficiency and a highly evolved prioritization platform tailored to deliver voice, video and data applications, Tsunami Quickbridge® 820 satisfies carriers, wireless service providers and Government organizations with requirements for reliable cost optimized high performance wireless backhaul.

Leveraging the advantages of OFDM and the latest MIMO radio innovations, Tsunami Quickbridge® 820 series draws on Proxim's proprietary Wireless Outdoor Router Protocol (WORP®) to deliver an unmatched outdoor wireless performance when compared to other products in the market today.

World Class Performance

- Features a very small form factor and an outdoor rated IP67 Metal enclosure Available with 15 dBi integrated antenna
- 50 Mbps (license upgradable to 100 Mbps) or directly 100 Mbps of throughput with maximum data rates of 300Mbps
- Provides flexible channel planning with support for 4.900 to 5.000 GHz (L mask) and 5.150 - 5.925 GHz
- Comes with a 2x2 MIMO high power radio capable of 26 dBm transmit power Allows flexible bandwidth allocation for service tiers
- Spectrum analysis feature helps to study frequency bands for interference, and select a relatively low interference channel

All-in-One Link with Security Features

- Built-in feature rich network protocols for Bridging and Routing
- Advanced encryption protects over-the-air transmission via AES-128

- Radio mutual authentication eliminates unauthorized use of the system by rogue End Point and man-in-the middle attacks
- MAC, Ether type, IP address packet filtering provides granular network security
- Uses Proxim's Wireless Outdoor Routing Protocol (WORP®) to prevent snooping
- Features highly-secure remote management via SSL, SSH and SNMPv3

Cost Effective and Ease of Installation for Quick Return on Investment

- Low-cost bundle including both radio and mounting kit provides the industry's most aggressive price point, enabling any deployment to enjoy a quick return on investment
- License-free frequency bands worldwide provide reliable wireless broadband without the high cost of licensed frequencies
- Comes as a complete "Hop-In-A-Box" compact outdoor form factor offering unprecedented ease of installation
- Simplified web interface to optimized link deployment. Advanced detailed interface is still accessible if needed.
- Non Line-of-Sight capability provided by Advanced Orthogonal Frequency Division Multiplexing (OFDM) along with 2x2 MIMO eases deployment in challenging areas
- Synchronization ready to optimize channel usage of collocated link

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.

PRODUCT MODELS		Part Number																												
QB-825-LNK-50*	Tsunami® QB 825 Link , 50 Mbps (upgradable to 100 Mbps), MIMO 2x2, 15 dBi antenna (Two QB-825-EPR-50')	902-00638	QB-825-LNK-50'-US	902-00637	QB-825-LNK-50'-WD																									
QB-825-LNK-100	Tsunami® QB 825 Link , 100 Mbps, MIMO 2x2, 15 dBi antenna (Two QB-825-EPR-100)	902-00591	QB-825-LNK-100-US	902-00590	QB-825-LNK-100-WD																									
INTERFACES																														
WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000 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				* Not applicable for DFS Band																									
DATA RATE	MCS 0 to 15 for High Throughput mode (6.5 – 300 Mbps) with Dynamic Data Rate Selection																													
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																													
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																													
RX SENSITIVITY (BER=10 ⁻⁶)	<table border="1"> <thead> <tr> <th>Channel Size</th> <th>40 MHZ</th> <th>20 MHZ</th> <th>10 MHz</th> <th>5 MHz</th> </tr> </thead> <tbody> <tr> <td>MCS 0</td> <td>-88 dBm</td> <td>-92 dBm</td> <td>-93 dBm</td> <td>-94 dBm</td> </tr> <tr> <td>MCS 7</td> <td>-72 dBm</td> <td>-74 dBm</td> <td>-75 dBm</td> <td>-77 dBm</td> </tr> <tr> <td>MCS 8</td> <td>-88 dBm</td> <td>-91 dBm</td> <td>-93 dBm</td> <td>-94 dBm</td> </tr> <tr> <td>MCS 15</td> <td>-69 dBm</td> <td>-71 dBm</td> <td>-72 dBm</td> <td>-75 dBm</td> </tr> </tbody> </table>					Channel Size	40 MHZ	20 MHZ	10 MHz	5 MHz	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
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SYNCHRONIZATION																														
Synchronize internal clock to Pulse Per Second signal received from either GPS module connected to RJ11 serial port or Ethernet Synchronization module connected to RJ45 ethernet port																														
ANTENNA																														
QB-825-EPR-50' and QB-825-EPR-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, 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																													
NETWORK																														
MODES	Bridging (support LACP through external switches), Routing (RIP v2 and IP tunneling)																													
GATEWAY FEATURES	DHCP Server & relay, NAT with Std ALGs																													
IP STACK	IPv4 and IPv6 simultaneously																													
THROUGHPUT	QB-825-EPR-50': Up to 50 Mbps (license upgradable to 100 Mbps), QB-825-EPR-100: Up to 100 Mbps																													
QoS	<table border="1"> <tbody> <tr> <td>Asymmetric Bandwidth Control</td> <td>Uplink and Downlink CIR Control "committed information rate" per service flow Uplink and Downlink MIR Control "maximum information rate" per service flow</td> </tr> <tr> <td>Packet Classification Capabilities</td> <td>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</td> </tr> <tr> <td>Scheduling</td> <td>Best Effort, Real Time Polling Services</td> </tr> </tbody> </table>					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																			
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Scheduling	Best Effort, Real Time Polling Services																													
VLAN	802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging																													
POWER SUPPLY																														
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, WATER & DUST PROOF, WIND LOADING																										
-40° to 55°C (-40° to 131° 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)																										
11.81 x 10.83 x 5.31 in (300 x 275 x 135 mm)		4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm)		7.27 lbs (3.3 Kg) 2.1 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																														
<ul style="list-style-type: none"> One Tsunami® QB-825-LNK-50' / 100 with integrated antennas (Two Tsunami® QB-825-EPR-50' / 100) Two 32 W power injector with country specific power cord Two Connector weatherproofing kit (Includes all recommended weatherproofing material) Two Quick Installation Guide 			<ul style="list-style-type: none"> Two Wall / Pole mounting kit Two Serial (RJ-11 to DB9) dongle Two Grounding kit 																											
MTBF & WARRANTY																														
MTBF over 350,000 hours & 2-year warranty with ServPak Extended Support available																														