Tsunami Quickbridge® 830 Series

Compact Point-to-Point Wireless Bridge Bundle

Presenting Proxim's newest compact Point-to-Point wireless backhaul solution.

Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range broadband wireless solutions. Proxim introduces Tsunami Quickbridge® 830 series Point-to-Point (PtP) wireless backhaul solution, designed to address cost sensitive customers who need a lower throughput offering in a carrier class product.

With this complete "Hop-in-a-Box" solution delivering up to 50 Mbps throughput, deployments of all sizes will enjoy a quick return on investment. The QB-830 supports excellent spectrum efficiency thanks to Proxim ClearConnect™ suite of over 13 different techniques all working together to ensure robust and reliable radio communications in noisy deployments. In addition with Proxim's WORP®, a highly evolved prioritization platform tailored to deliver voice, video and data applications, Tsunami Quickbridge® 830 series satisfies carriers, wireless service providers and Government organizations which require reliable, cost optimized high performance wireless backhaul.

World Class Performance

- Features a very small form factor and an outdoor rated IP67 Metal enclosure
- Comes with 15 dBi integrated antenna
- 25 Mbps (license upgradable to 50 Mbps) or 50 Mbps of throughput
- Provides flexible channel planning with support for 4.900 to 5.000 (L mask) and 5.150 to 5.925 GHz
- Comes with a 2x2 MIMO high power radio capable of 26 dBm combined transmit power
- Allows flexible bandwidth allocation for service tiers
- Spectrum analysis feature displays interferers allowing users to select a cleaner channel with less interference.

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
- Symplified web interface to optimized link deployement. 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

Specifications: Tsunami Quickbridge® 830 Series

PRODUCT MODELS

QB-835-LNK-25	Tsunami® QB 835 Link, 25 Mbps (upgradable to 50 Mbps), MIMO 2x2, 15dBi antenna (Two QB-835-EPR-25)
QB-835-LNK-50	Tsunami® QB 835 Link, 50 Mbps, MIMO 2x2, 15dBi antenna (Two QB-835-EPR-50)

PART NUMBERS

902-00815 QB-835-LNK-25-US	902-00817 QB-835-LNK-25-WD
902-00819 QB-835-LNK-50-US	902-00821 QB-835-LNK-50-WD

INTERFACES

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

RADIO & TX SPECS

MIMO	2x2 MIMO
MODULATION	OFDM with BPSK, QPSK, QAM16, QAM64
FREQUENCY	4900 - 5925 GHz (Subject to Country Regulations)
CHANNEL SIZE	40 MHz, 20 MHz, 10 MHz*, 5 MHz* channel bandwidths * DFS availability is country dependant, 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
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})

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

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)

NETWORK

MODES	Bridging , Routing (RIP v2 and IP tunneling)
GATEWAY FEATURES	DHCP Server & relay, NAT with Std ALGs
THROUGHPUT	QB-835-LNK-25: Up to 25 Mbps (license upgradable to 50 Mbps), QB-835-LNK-50: Up to 50 Mbps

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

VLAN: 802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging

POWER SUPPLY

Via provided PoE Injector

POWER CONSUMPTION

6 Watt typical (15 Watt max)

ENVIRONMENTAL SPECS

OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY, WATER & DUST PROOF
-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, CAN/CSA-C22.2 No. 60950-1/22, IEC 60950-1/22, EN 60950-1/22

PACKAGE CONTENTS

- One Tsunami® QB-835-LNK-25/50 with integrated antenna (Two Tsunami® QB-835-EPR-25/50)
- Two 20 W power injector and country specific power cord
- Two Connector weatherproofing kit (Includes all recommended weatherproofing material)
- Two Grounding kit
- Two basic Pole mounting kit
- Two Quick Installation Guide

MTBF & WARRANTY

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