

# Tsunami Quickbridge® 826 series

## Compact Point-to-Point Wireless Bridge Bundle



### Presenting Proxim's newest compact Point-to-Point wireless backhaul solution operating in the 5.900 – 6.425 GHz band

Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range broadband wireless solutions. Proxim introduces Tsunami Quickbridge® 826 series, an incredibly cost-effective, non Line-of-Sight Point-to-Point (PtP) wireless backhaul solution. With this complete “Hop-in-a-Box” solution delivering up to 100 Mbps throughput, deployments of all sizes will enjoy a quick return on investment.

With excellent spectrum efficiency and a highly evolved prioritization platform tailored to deliver voice, video and data applications, Tsunami Quickbridge® 826 series satisfies carriers, wireless service providers and Government organizations with requirements for reliable cost optimized high performance wireless backhaul operating in the 5.900 – 6.425 GHz band.

Leveraging the advantages of OFDM and the latest MIMO radio innovations, Tsunami Quickbridge® 826 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
- 100Mbps of throughput with maximum data rates of 300Mbps
- Provides flexible channel planning with support for 5.900 to 6.425 GHz
- Comes with a 2x2 MIMO high power radio capable of 25 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
- Non Line-of-Sight capability provided by Advanced Orthogonal Frequency Division Multiplexing (OFDM) along with 2x2 MIMO eases deployment in challenging areas

**PRODUCT MODELS**

QB-826-LNK-100 Tsunami® QB 826 Link, 100 Mbps, MIMO 2x2, 15dBi integrated antenna (Two QB-826-EPR-100)

**INTERFACES**

WIRED ETHERNET One auto MDI-X RJ45 10/100 Mbps 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 5.900 – 6.425 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  
 TX POWER Up to 25 dBm (dual chain)  
 TX POWER CONTROL 0 – 20 dB, in 0.5 dB steps. Automatic TPC with configurable EIRP limit  
 OTHER Dynamic Channel Selection (DCS) based on interference detection, Automatic Transmit Power Control (ATPC) with EIRP limit support

RX SENSITIVITY (Per=10%)

Channel Size	40 MHZ	20 MHZ	10 MHZ	5 MHZ
MCS 0	-90 dBm	-93 dBm	-97 dBm	-100 dBm
MCS 7	-70 dBm	-73 dBm	-75 dBm	-78 dBm
MCS 8	-88 dBm	-91 dBm	-94 dBm	-96 dBm
MCS 15	-66 dBm	-69 dBm	-71 dBm	-74 dBm

**ANTENNA**

Integrated 15 dBi dual Polarized (H+V) panel antenna

**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  
 IP STACK IPv4 and IPv6 simultaneously  
 THROUGHPUT Up to 100 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 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)
13.97 x 8.86 x 6.92 in (355 x 225 x 176 mm)	4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm) – Each End Point	9.8 lbs (4.45 Kg)	2.1 lbs (0.950 kg) – Each end point

**SAFETY STANDARDS**

UL 60950-1/22

**PACKAGE CONTENTS**

- One Tsunami® QB-826-LNK-100 with integrated antenna (Two Tsunami® QB-826-EPR-100)
- Two 20 W power injector and country specific power cord
- Two basic Pole mounting kit
- Two Connector weatherproofing kit (Includes all recommended weatherproofing material)
- Two Grounding kit
- Two Quick Installation Guide

**MTBF & WARRANTY**

>200,000 hours & 1-year; ServPak Extended Support available.