Tsunami QuickBridge® 8200 series
High Power Point-to-Point Wireless Bridge Bundle

Next generation of field-proven Tsunami QuickBridge® 8200 wireless backhaul solution that exceeds 4G speed requirements with 300 Mbps data rate!

Tsunami® QB-8200, is a high power, extremely reliable and a cost-effective, non-line-of-sight 4G point-to-point (PtP) wireless backhaul solution. It delivers data rates of 300 Mbps, along with excellent spectrum and 25.8 dBm high power radios for extend coverage.

With its incredible channel capacity & flexibility, excellent spectrum efficiency and a highly evolved prioritization platform tailored to deliver voice, video and data applications, Tsunami® QB-8200 satisfies carriers, wireless service providers and Government organizations with requirements for fast and reliable wireless backhaul.

Tsunami® QB-8200 leverages the advantages of OFDM, MIMO radio innovations and Proxim’s proprietary Wireless Outdoor Routing Protocol (WORP®) to provide wireless performance in excess of 4G products on the markets today.

World Class Performance
* Point-to-Point system that delivers 300 Mbps data rate at distances of over 5 miles (8 km)
* Very low latency of 2 to 3 ms to support voice and video applications over long distances
* Dual IPv4 and IPv6 stack for transparent evolution to tomorrow networks
* Built-in feature rich network protocols for bridging, routing and gateway functionality

Non-Line-of-Sight and Advanced Features
* Non-line-of-sight capable, utilizing OFDM and enhanced 3x3 MIMO techniques to better penetrate through obstructions
* Features dual Gigabit Ethernet ports with PoE out to power other devices like surveillance cameras or additional radios
* Enables packet identification to create unique and sophisticated service rules and tiered service classes with ease
* Compatibility with LACP switches for link aggregation
* Spectrum analyzer to help study frequency bands for interference, and select a relatively low interference channel

Frequency Agnostic
* Operates in licensed and unlicensed frequency bands
* Flexible channel planning with 5, 10, 20 and 40MHz size
* Provides support for extended frequency bands from 4.900 to 5.925 GHz

Carrier-Grade Security
* Implements tiered security layers for the most secure outdoor wireless communications in the unlicensed frequency spectrum
* Utilizes Proxim’s Wireless Outdoor Routing Protocol (WORP®), which prevents snooping, and features highly-secure remote management via SSL, SSH and SNMPv3
* Provides military-grade security with AES encryption technology, prevents unsecure client-to-client communications and leverages MAC, Ether type and IP address packet filtering for granular network security

Cost Effective and Ease of Use for Quick Return on Investment
* Suitable for the carriers, WISP and Government markets
* Certified for deployments in the Americas, Europe and Asia
* The most cost-effective, high performance point-to-point solution from Proxim, enabling any deployment to enjoy a quick return on investment

Product Line Compatibility
* Connects to existing Tsunami® QB-8100

Performance Matters. Proxim Delivers.™

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PRODUCT MODELS

QB-8200-LNK
Tsunami® QB 8200 Link, 300 Mbps, MIMO 3x3, Type-N Connectors (Two QB-8200-EPA)

QB-8250-LNK
Tsunami® QB 8250 Link, 300 Mbps, MIMO 2x2, 23 dB Integrated Antenna (Two QB-8250-EPR)

INTERFACES

WIRED ETHERNET
Two auto MDI-X RJ45 10/100/1000Mbps Ethernet (Port #1 with PoE in & Data, Port #2 with PoE out (802.3af pin out) & Data)

WIRELESS PROTOCOL
WORP® (Wireless Outdoor Router Protocol)

RADIO & TX SPECS

MIMO
3x3 MIMO with 2 data streams

MODULATION
OFDM

FREQUENCY
4.500 – 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 CONTROL
Up to 25.8 dbm (Triple chain)

OTHER
0 – 25 dB, 0.5 dB steps. Automatic TPC with configurable EIRP limit

Dynamic Channel Selection (DCH) based on interference detection. Dynamic Frequency Selection (DFS) based on radar signature. Automatic Transmit Power Control (ATPC) with EIRP limit

RX SENSITIVITY (Par=10%)

Channel Size | 40 MHz | 20 MHz | 10 MHz | 5 MHz
---|---|---|---|---
MCS 0 | -87 dBm | -93 dBm | -95 dBm | -88 dBm
MCS 7 | -71 dBm | -74 dBm | -76 dBm | -79 dBm
MCS 8 | -87 dBm | -91 dBm | -93 dBm | -96 dBm
MCS 15 | -68 dBm | -72 dBm | -74 dBm | -77 dBm

LATENCY
< 3 msec

ANTENNA

QB-8200-EPA
Three N-type Connectors with built-in Surge Protection

QB-8250-EPR
Integrated 2x2 MIMO 23dBi Dual Polarized Antenna

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-3411, RFC-3412, RFC-3414, Private MIB

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
Up to 246 Mbps

QoS
Asymmetric Bandwidth Control

Packet Classification Capabilities
802.1Q/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 Mesh modes. QinQ double tagging

POWER CONSUMPTION
12 Watt typical (22 Watt max)

ENVIRONMENTAL SPECS

OPERATING TEMPERATURE
-40º to 60ºC (-40º to 140º Fahrenheit) Will continue operating if temperature temporarily varies between -50º and 70ºC (-58º and 158º Fahrenheit)

STORAGE TEMPERATURE
-55º to 80ºC (-67º to 176º Fahrenheit)

HUMIDITY, IP RATING, WIND LOADING
100% relative humidity - IP67, 200 km/h (125 mph)

PHYSICAL SPECS

DIMENSIONS (PACKAGE)
- QB-8200-EPA: 14.56 x 13.69 x 8.18 in (370 x 348 x 208 mm)
- QB-8250-EPR: 15.94 x 15.94 x 9.21 in (405 x 405 x 234 mm)

DIMENSIONS (UNPACKAGED)
- QB-8200-EPA: 10.79 x 11.14 x 3.38 in (274 x 283 x 86 mm)
- QB-8250-EPR: 14.17 x 14.17 x 3.70 in (370 x 370 x 94 mm)

WEIGHT (PACKAGE)
- QB-8200-EPA: 15 lbs (6.8 kg)
- QB-8250-EPR: 16.31 lbs (7.4 kg)

WEIGHT (UNPACKAGED)
- QB-8200-EPA: 7.7 lbs (3.5 kg)
- QB-8250-EPR: 9.0 lbs (4.1 kg)

SAFETY STANDARDS

UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -22)

PACKAGE CONTENTS
- One Tsunami® QB-8200-LNK based on two QB-8200-EPA with three N-type surge protected connectors or One Tsunami® QB-8250-LNK based on two QB-8250-EPR with an integrated 23dB dual polarized panel antenna
- Two power injector and country specific power cord
- Two Wall / Pole mounting kit
- Two Connector weatherproofing kit (Includes all recommended weatherproofing material)
- Two Serial (RJ-11 to DB9) dongle
- Two Grounding kit
- Two Gigabit PoE Surge Arrestor
- One Quick Installation Guide

MTBF & WARRANTY
>250,000 hours & 1-year on parts and labor; ServPak Extended Support available