



Tsunami® QB-8150-LNK-100

Wireless Product Portfolio

- **Tsunami™ 8000 Series**

PtP & PtMP product line delivering 300 Mbps plus data rate

- **Tsunami™ .11 Series**

Our best selling Point-to-point and multipoint product line

- **Tsunami™ GX-800 Series**

Carrier-class IP Ethernet bridge for voice and data backhaul for service providers and enterprise applications

- **ORiNOCO® AP 8000 Series**

The industry's highest performance 802.11a/b/g/n access points

Proxim Wireless is a global pioneer of end-to-end broadband wireless systems that deliver the quadruple play. From Wi-Fi to wireless Gigabit Ethernet – our WLAN, mesh, WiMAX and point-to-point products are available through our extensive global channel networks.

Presenting Proxim's newest entry-level Point-to-Point wireless backhaul solution which can deliver up to 2x50 Mbps at an unbeatable price to performance ratio!

Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range broadband wireless solutions. Proxim introduces the Tsunami® QB-8150-LNK-100, an incredibly cost-effective, non Line-of-Sight Point-to-Point (PtP) wireless backhaul solution. With 2x50 Mbps performance in a complete "Hop-in-a-Box", 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, the Tsunami® QB-8150-LNK-100 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, the Tsunami® QB-8150-LNK-100 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.

Performance and Features

- Available with an integrated 21dBi dual polarized antenna
- 2x50 Mbps of throughput performance with maximum data rates up to 300Mbps
- Carrier grade advanced security with AES-128 bit encryption and built-in feature-rich network protocols for bridging, routing and gateway functionality
- Provides flexible channel planning with support from 4.900 to 5.875 GHz
- Comes with a 2x2 MIMO high power radio capable of 21dBm transmit power
- Allows flexible bandwidth allocation for optimization of service tiers
- Spectrum analyzer feature helps to study frequency bands for interference, and select a relatively low interference channel
- Dual IPv4 and IPv6 stack for transparent evolution to tomorrow networks

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

All-in-One with Security & Gateway Features

- Built-in feature rich network protocols for Bridging, Routing and Gateway functionality
- Advanced encryption protects over-the-air transmission via AES-128
- Radio mutual authentication eliminates unauthorized use of the system by rogue subscriber units 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

PRODUCT MODELS					
QB-8150-LNK-100	Tsunami QB 8150 Link, 2x50 Mbps, MIMO 2x2, 21dBi integrated antenna				
INTERFACES					
WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000Mbps Ethernet				
WIRELESS PROTOCOL	WORP® (Wireless Outdoor Router Protocol)				
RADIO & TX SPECS					
MIMO	2x2MIMO				
MODULATION	OFDM				
FREQUENCY	4.900 – 5.875 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 – 100 Mbps) with Dynamic Data Rate Selection				
TX POWER	Up to 21dBm (two Tx chain)				
TX POWER CONTROL	0 – 25 dB, in 0.5 dB steps. Automatic TPC with configurable EIRP limit				
RX SENSITIVITY (PER=10%)	Channel Size	40 MHz	20 MHz	10 MHz	5 MHz
	MCS 0	-87dBm	-93 dBm	-94 dBm	-96 dBm
	MCS 7	-71dBm	-75 dBm	-78 dBm	-81 dBm
	MCS 8	-87 dBm	-93 dBm	-94 dBm	-95 dBm
	MCS 15	-69 dBm	-71 dBm	-74 dBm	-77 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				
LATENCY	3 msec (typical)				
ANTENNA	QB-8150-EPR-100	Integrated 2x2 MIMO 21 dBi Dual Polarized panel 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-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB				
OTHER	Syslog, sFlow™ agent, SNMP and local time				
SECURITY					
ENCRYPTION	AES-CCM 128 bits				
AUTHENTICATION	Internal MAC Address Control List, Radius based Authentication				
NETWORK					
MODES	Bridging, Routing (RIP v2 and IP tunneling)				
IP STACK	IPv4 and IPv6 simultaneously				
THROUGHPUT	50 Mbps (TCP) each direction (100 Mbps aggregated)				
GATEWAY FEATURES	DHCP Server & relay, NAT with Std ALGs				
QoS	Asymmetric Bandwidth Control	UL and DL CIR Control "committed information rate" per service flow UL and DL 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	7 Watt typical (17 Watt max)				
ENVIRONMENTAL SPECS					
OPERATING TEMPERATURE	-40° to 60°C (-40° to 140° Fahrenheit) Will continue operating if temperature temporarily drop down to -50 °C (-58 ° Fahrenheit).				
STORAGE TEMPERATURE	-55° to 80°C (-67° to 176° Fahrenheit)				
HUMIDITY - IP RATING	100% relative humidity - IP67				
WIND LOADING	200 km/h (125 mph)				
PHYSICAL SPECS		DIMENSIONS			WEIGHT
PACKAGED	QB-8150-EPR-100	15.94 x 15.94 x 9.21 in. (405 x 405 x 234 mm)			16.31 lbs (7.4 kg)
UNPACKAGED	QB-8150-EPR-100	14.17 x 14.17 x 3.70 in (370 x 370 x 94 mm)			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	<ul style="list-style-type: none"> ■ One Tsunami® QB-8150-LNK-100 based on two QB-8150-EPR-100 with an integrated 21dBi dual polarized panel antenna ■ Two power injector and country specific power cord ■ Two Pole mounting kit ■ Two Connector weatherproofing kit (Includes all recommended weatherproofing material) ■ Two Grounding kit ■ One Quick Installation Guide 				
MTBF and WARRANTY	80,000 hours & 1-year on parts and labor; ServPak Extended Support available.				

APPLICATIONS

• Backhaul to a Central POP

Avoid expensive installation and recurring charge of a second wireline backhaul to a remote virtual POP

• Leased Line Redundancy

Eliminate recurring leased line charges with one time installation charge of a Tsunami QuickBridge® link

• Repeater

Extend distance or overcome path blockage by adding point-to-point hops

• High-bandwidth Last Mile Access

Use Tsunami QuickBridge® to deliver TLS (Transparent LAN Services) to corporate parks

• Inter-POP Redundancy

Avoid downtimes caused by a wireline backhaul failure by adding a Tsunami QuickBridge® link as an inter-POP redundancy