



Tsunami™ QB-8150-LNK-12

End-to-End Broadband Wireless Product Portfolio

Proxim Wireless offers the industry's most complete suite of outdoor broadband wireless access products.

This portfolio includes:

- **Tsunami™ QB-8100** – Proxim's Point-to-Point Product line delivering wireless performance in excess of 4G products on the market today
- **Tsunami® QuickBridge.11** – Easiest-to-install "Hop-in-a-box" complete kit Ethernet Bridge for campus and small business networks
- **Tsunami™ MP-8100** – Proxim's Point-to-Multipoint Product line delivering wireless performance in excess of 4G products on the market today.
- **Tsunami™ MP.11** – Proxim's best selling Point-to-Multipoint product line for global markets
- **Lynx.GX®** – Cellular voice and data backhaul, up to DS3 interface
- **Tsunami®.GX** - Carrier-class IP Ethernet Bridge for voice and data backhaul for service providers and enterprise applications
- **ORINOCO® Access Point** - World-class performance enterprise 11n 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 12Mbps 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-12, an incredibly cost-effective, non Line-of-Sight Point-to-Point (PtP) wireless backhaul solution. With 12 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-12 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-8100-LNK-12 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 16dBi dual polarized antenna
- Comes with a 2x2 MIMO high power radio capable of 24dBm transmit power
- Entry-level 12Mbps version for applications like T1/E1 line backhaul
- Carrier grade advanced security with AES-256¹ bit encryption and built-in feature-rich network protocols for bridging, routing and gateway functionality
- Supports Large ethernet frame up to 2048 bytes for backhauling MPLS traffic in carrier class deployments
- Provides flexible channel planning with support from 5.3 to 6.1 GHz
- Allows flexible bandwidth allocation for optimization of service tiers

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 CPE 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-256¹
- 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-12-WD	Tsunami™ QB 8150 Link, 12 Mbps, MIMO 2x2, 16dBi Integrated antenna – World SKU ²
Radio & TX Specs	
MIMO	2x2
Modulation	OFDM with BPSK, QPSK, 16QAM, 64QAM
Operating Frequency	5.3 ~ 6.1GHz (Subject to Country Regulations)
Channel Size	5MHz, 10MHz, 20MHz, 40MHz
TX Power	Up to 24dBm
TX Power Control	0.5 dB steps
Latency	5ms (typical)
Wireless Encryption	128-bit & 256-bit AES ¹
Antenna	Integrated 16dBi dual polarized (H+V) antenna
Interfaces	
Wired Ethernet	One Auto MDI-X RJ45 100Mbps Ethernet port
Wireless Protocol	WORP (Wireless Outdoor Router Protocol)
Management	
Local	RS-232 serial port with RJ11 front face
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
Network	
Large Frame	Up to 2048 bytes
Throughput	12 Mbps
Gateway Features	DHCP Client, Server, Relay, NAT with Std ALGs, Bridging, Routing & Syslog
QoS	Asymmetric Bandwidth Control, Packet Classification Capabilities, Scheduling
VLAN	802.1Q: Management VLAN, Transparent, Access and Trunk mode
Environmental Specs	
Temperature	
Operating	-33° to 60° C (-27.4° to 140° F)
Storage	-40° to 70° C (-40° to 158° F)
Humidity	
Operating	Max 95% relative humidity (non-condensing)
Storage	Max 95% relative humidity (non-condensing)
Water & Dust Proof	IP65
Regulatory	
Certifications	FCC Part 15 Rules for U-NII devices IC - RSS-210 ETSI - EN 300 328, EN 301 489 1/17, EN 301 893 v1.5.1, EN 302 502, EN 62311
Physical Specs	
Dimensions (LxWxH)	Packaged: 415 x 340 x 270 mm Unpackaged: 197.5 x 192 x 100 mm (each unit)
Weight	Packaged: 2.2 kg (4.85 lbs) Unpackaged: 0.69 kg (1.51 lbs) (each unit)
Electrical	
Device Power Rating	7 watts (typical), 13.8 watts (max)
Input Power	via PoE Power Injector, 48V-DC, 0.40A (included in the package)
MTBF	>75,000 hours
Warranty	1 year parts and labor
Package Contents	Two QB End Point units with 16dBi integrated antenna, two PoE Injectors with power cords, two Pole Mounting kits, two Grounding kits, two Connector Weather Proofing kits, two printed QIGs
Accessories	Universal Mounting Bracket for wall mounting (Part # 77537)
Related Products	Tsunami™ MP-8100-BSU, Tsunami™ MP-8100-SUR/SUA, QB-8100, ServPak for enhanced support, ProximVision ES NMS

¹ Available via Software upgrade

² Available only in Asia, Middle East and CALA Markets

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