

# Tsunami® QB-10100-LNK Series

## Compact Point-to-Point Wireless Bridge Bundle



### Proxim introduces the all new Tsunami Quickbridge® 10100 wireless backhaul solution that delivers 50, 100 or 200 Mbps throughput

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-10100-LNK Series, a compact, license controlled throughput, high power, extremely reliable and cost-effective, near-line-of-sight point-to-point (PtP) wireless backhaul solution.

Tsunami® QB-10100-LNK Series can rely on the following features to satisfy carriers, wireless service providers and Government organizations that need high-speed carrier class wireless backhaul:



Proxim WORP®, a highly evolved QoS platform tailored to deliver voice, video and data applications



Proxim ClearConnect™, a suite of different techniques all working together to ensure robust and reliable radio communications in noisy deployments

### World Class Performance

- Point-to-Point system that delivers 50, 100 or 200 Mbps (license upgradable) throughput, with maximum data rates of 866 Mbps
- Compact form factor and outdoor rated IP67 Metal enclosure and N-Type connectors
- 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

### Frequency Agnostic

- Operates in unlicensed bands from 4.900 to 5.925 GHz
- Flexible RF planning with 20, 40 and 80 MHz channel size

### Near-Line-of-Sight and Advanced Features

- Near-line-of-sight capable, utilizing OFDM and enhanced 2x2 MIMO techniques for better RF propagation
- Performs deep packet inspection (DPI) to create unique and sophisticated service rules and tiered service classes with ease
- Spectrum analyzer to help study frequency bands for interference, and select a relatively low interference channel

### Carrier-Grade Backhaul

- Implements AES encryption and Radius authentication 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/TLS1.2, SSH and SNMPv3
- Gigabit Ethernet port with pass-through IEEE 1588v2 synchronization and support for 9k Jumbo frame.

### Cost Effective and Ease of Use for Quick Return on Investment

- Suitable for Service Providers, Enterprises and Governments
- Fully integrates within ProximVision® Advanced Cloud Based Carrier Management System and Controller
- The most cost-effective, high performance point-to-point solution from Proxim, enabling any deployment to enjoy a quick return on investment

PRODUCT MODELS		PART NUMBERS			
QB-10100-LNK-50	Tsunami® QB 10100 Link, 50 Mbps, MIMO 2x2, Type-N Connectors (two QB-10100-EPA-50)	902-00847	QB-10100-LNK-50-US	902-00849	QB-10100-LNK-50-WD
QB-10100-LNK-100	Tsunami® QB 10100 Link, 100 Mbps, MIMO 2x2, Type-N Connectors (two QB-10100-EPA-100)	902-00851	QB-10100-LNK-100-US	902-00853	QB-10100-LNK-100-WD
LICENSE UPGRADE					
QB-10100-LNK-100-UPG	Tsunami® QB 10100 Link, 50 Mbps to 100 Mbps license upgrade	997-00038			
QB-10100-LNK-200-UPG	Tsunami® QB 10100 Link, 100 Mbps to 200 Mbps license upgrade	997-00039			
INTERFACES					
WIRED ETHERNET	One auto MDI-X RJ45 10/100/1000Mbps Ethernet with PoE in				
WIRELESS PROTOCOL	WORP® (Wireless Outdoor Router Protocol)				
RADIO & TX SPECS					
MIMO	2x2:2				
MODULATION	OFDM with BPSK, QPSK, QAM16, QAM64, QAM256				
FREQUENCY	4.900 – 5.925 GHz (Subject to Country Regulations)				
CHANNEL SIZE	80 MHz, 40 MHz and 20 MHz (±5ppm channel accuracy)				
DATA RATE	MCS 0 to 9 with Dynamic Data Rate Selection				
TX POWER	Up to 28 dBm (dual chain)				
TX POWER CONTROL	0 - 27 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit				
	80 MHz	40 MHz	20 MHz		
TX POWER	MCS0: 28	MCS0: 28	MCS0: 29		
	MCS9: 21	MCS9: 22	MCS8: 25		
RX SENSITIVITY (Per=10%)	MCS0: -89	MCS0: -93	MCS0: -94		
	MCS9: -68	MCS9: -71	MCS8: -74		
THROUGHPUT	License controlled to 50, 100 or 200 Mbps				
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				
ANTENNA					
	QB-10100-EPA	Two N-type Connectors with built-in Surge Protection			
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				
SYNCHRONIZATION					
	Pass-through IEEE 1588v2 Ethernet Synchronization				
SECURITY					
ENCRYPTION	AES 128				
AUTHENTICATION	Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)				
QoS					
	Asymmetric Bandwidth Control	Asymmetric UL/DL committed and maximum information rate per service flow			
	Packet Classification Capabilities	802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType			
	Scheduling	Best Effort, Real Time Polling Services			
NETWORK					
MODES	Bridging, Routing (RIP v2 and IP tunneling)				
IP STACK	IPv4 and IPv6 simultaneously				
GATEWAY FEATURES	DHCP Server & relay, NAT with Std ALGs, PPPoE end point with Proxy DNS				
VLAN	802.1Q: Management VLAN, Transparent, Access, Trunk and Mixed mode, QinQ double tagging				
POWER SUPPLY					
	36 to 57 VDC via Ethernet port (Power over Ethernet)				
	12 VDC via Access port				
	Power should not be provided simultaneously on both ports				
POWER CONSUMPTION					
	17 Watt typical				
ENVIRONMENTAL SPECS					
	OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY, IP RATING,	WIND LOADING	
	-40° to 60°C (-40° to 140° Fahrenheit)	-50° to 70°C (-58° to 158° Fahrenheit)	100% relative humidity - IP67,	180 km/h (112.5 mph)	
PHYSICAL SPECS					
	PRODUCT MODELS	DIMENSIONS PACKAGED (per unit)	DIMENSIONS UNPACKAGED (per unit)	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
	QB-10100-EPA	11.81x10.83x5.31 in (300x275x135 mm)	5.02x8.68x2.85 in (127.5x220.5x72.5 mm)	6.39 lbs (2.9 kg)	2.75 lbs (1.250 kg)
SAFETY STANDARDS					
	UL 60950, CAN/CSA-C22.2 No. 60950, IEC 60950, EN 60950 (part -1 and -22)				
CERTIFICATIONS					
	USA: FCC 90Y + 15E (UNII 15.247); Canada: IC RSS 102 + RSS 111 + RSS 247				
	Europe: RED EN 301 489-1 + EN 301 489-17 + EN 301 893 + EN 302 502				
PACKAGE CONTENTS					
	<ul style="list-style-type: none"> <li>One Tsunami® QB-10100-LNK with two N-type surge protected connectors (Two QB-10100-EPA)</li> <li>Two power injector and country specific power cord</li> <li>Two Connector weatherproofing kit (Includes all recommended weatherproofing material)</li> </ul>		<ul style="list-style-type: none"> <li>Two Pole mounting kit</li> <li>Two Grounding kit</li> <li>Two Quick Installation Guide</li> </ul>		
MTBF & WARRANTY					
	MTBF over 250 000 hours & 2-year warranty with ServPak Extended Support available.				