

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

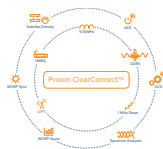
Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range broadband wireless solutions.

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 QB-10100-LNK-100	Tsunami® QB 10100 Link, 50 Mbps, MIMO 2x2, Type-N Connectors (two QB-10100-EPA-50) Tsunami® QB 10100 Link, 100 Mbps, MIMO 2x2, Type-N Connectors (two QB-10100-EPA-100)			902-00847 QB-10100-LNK-50-US 902-00851 QB-10100-LNK-100-US	902-00849 QB-10100-LNK-50-WD 902-00853 QB-10100-LNK-100-WD								
LICENSE UPGRADE													
QB-10100-LNK-100-UPG QB-10100-LNK-200-UPG	Tsunami® QB 10100 Link, 50 Mbps to 100 Mbps license upgrade Tsunami® QB 10100 Link, 100 Mbps to 200 Mbps license upgrade			997-00038 997-00039									
INTERFACES													
WIRED ETHERNET WIRELESS PROTOCOL	One auto MDI-X RJ45 10/100/1000Mbps Ethernet with PoE in WORP® (Wireless Outdoor Router Protocol)												
RADIO & TX SPECS													
MIMO MODULATION FREQUENCY CHANNEL SIZE DATA RATE TX POWER TX POWER CONTROL	2x2:2 OFDM with BPSK, QPSK, QAM16, QAM64, QAM256 4.900 – 5.925 GHz (Subject to Country Regulations) 80 MHz, 40 MHz and 20 MHz (±5ppm channel accuracy) MCS 0 to 9 with Dynamic Data Rate Selection Up to 28 dBm (dual chain) 0 - 27 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit												
TX POWER	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 33%;">80 MHz</td> <td style="width: 33%;">40 MHz</td> <td style="width: 33%;">20 MHz</td> </tr> <tr> <td>MCS0: 28</td> <td>MCS0: 28</td> <td>MCS0: 29</td> </tr> <tr> <td>MCS9: 21</td> <td>MCS9: 22</td> <td>MCS8: 25</td> </tr> </table>				80 MHz	40 MHz	20 MHz	MCS0: 28	MCS0: 28	MCS0: 29	MCS9: 21	MCS9: 22	MCS8: 25
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RX SENSITIVITY (Per=10%)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 33%;">MCS0: -89</td> <td style="width: 33%;">MCS0: -93</td> <td style="width: 33%;">MCS0: -94</td> </tr> <tr> <td>MCS9: -68</td> <td>MCS9: -71</td> <td>MCS8: -74</td> </tr> </table>				MCS0: -89	MCS0: -93	MCS0: -94	MCS9: -68	MCS9: -71	MCS8: -74			
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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 SNMP OTHER	Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3 SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790, RFC-2571, RFC-3412, RFC-3414, Private MIB Syslog, sFlow™ agent, SNTP and local time, Spectrum analyzer												
SYNCHRONIZATION													
	Pass-through IEEE 1588v2 Ethernet Synchronization												
SECURITY													
ENCRYPTION AUTHENTICATION	AES 128 Internal MAC Address Control List, Radius based Authentication (with VLAN and QoS provisioning)												
QoS													
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NETWORK													
MODES IP STACK GATEWAY FEATURES VLAN	Bridging, Routing (RIP v2 and IP tunneling) IPv4 and IPv6 simultaneously DHCP Server & relay, NAT with Std ALGs, PPPoE end point with Proxy DNS 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													
	11.5 Watt typical, 15.5 Watt maximum												
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)									
	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)									
				WEIGHT (UNPACKAGED)									
				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"> One Tsunami® QB-10100-LNK with two N-type surge protected connectors (Two QB-10100-EPA) Two power injector and country specific power cord Two Connector weatherproofing kit (Includes all recommended weatherproofing material) <ul style="list-style-type: none"> Two Pole mounting kit Two Grounding kit Two Quick Installation Guide 												
MTBF & WARRANTY													
	MTBF over 250 000 hours & 2-year warranty with ServPak Extended Support available.												