Tsunami Quickbridge® 10100 Series

Over 630 Mbps of High Availability Backhaul up to 40 Kilometers (25 Miles)

Fast and Flexible Backhaul Solutions

The Tsunami Quickbridge® 10100 series delivers high bandwidth backhaul with carrier class reliability in even the toughest of conditions.

Perfectly suited for the service provider or enterprise that needs to connect critical applications and services to the data center or the world.

The range of high-power, integrated and external antenna models provide the flexibility to design a backhaul link that will meet the most stringent criteria.

The Tsunami® Quickbridge® 10100 supports the following key features that are critical for carriers, wireless service providers and Government organizations that need to know they can rely on the network.

Rugged and Reliable

Designed for harsh environments, the Tsunami® QuickBridge® 10100 is fully IP67 rated, and will deliver years of reliable service in conditions that include, high winds, high salt, and high temperature extremes.

Highlights

- Service flow based QoS with deep packet inspection (DPI) to ensure that the most important data arrives with priority
- Very low latency enables support for time critical applications
- Operates in unlicensed bands from 4.900 to 5.925 GHz
- Flexible RF planning with 20, 40 and 80 MHz channel size
- Non Line-of-Sight capability provided by Advanced Orthogonal Frequency Division Multiplexing (OFDM) along with 2x2 MIMO eases deployment in challenging areas
- Deployment tools include spectrum analyzer, antenna alignment and remote management configuration
- Fully integrates within ProximVision® Advanced Carrier Management System.

Enabling Technologies

Proxim WORP® - Combines network access control, data scheduling, advanced QoS and encryption to ensure highly efficient and secure data transmission.

Proxim ClearConnect™, a suite of interference mitigation technologies ensuring robust and reliable communications in high-density wireless deployments.

About Proxim Wireless

Proxim Wireless is a pioneer and global leader in advanced Wi-Fi, point to point, and point to multipoint outdoor wireless systems that deliver high performance and high availability communications.

With over 30 years of wireless experience, Proxim is recognized for its unparalleled reliability, superior performance and drive for innovation.

Specifications: Tsunami Quickbridge® 10100 Series

PRODUCT MODELS

QB-10100-LNK	Tsunami® QB 10100 Link, single radio, 866 Mbps, MIMO 2x2, Type-N Connectors
QB-10150-LNK	Tsunami® QB 10150 Link, single radio, 866 Mbps, MIMO 2x2, 22 dBi integrated antenna
QB-10150-LKL	Tsunami® QB 10150 Link Long-range, single radio, 866 Mbps, MIMO 2x2, 28 dBi integrated antenna

PART NUMBERS

902-00769 QB-10100-LNK-US	902-00771 QB-10100-LNK-WD
902-00773 QB-10150-LNK-US	902-00775 QB-10150-LNK-WD
902-00779 QB-10150-LKL-US	902-00780 QB-10150-LKL-WD

INTERFACES

WIRED ETHERNET	Two auto MDI-X RJ45 10/100/1000Mbps Ethernet (Port #1 with PoE in & Data, Port #2 with PoE out & Data)
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	Up to 633 Mbps	Up to 324 Mbps	Up to 137 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
QB-10150-EPR	Integrated 2x2 MIMO 22dBi Dual Polarized 1 foot Panel Antenna
QB-10150-EPL	Integrated 2x2 MIMO 28dBi Dual Polarized 2 feet Panel Antenna

MANAGEMENT

REMOTE	Telnet and SSH, Web GUI and SSL/TLS, 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 (support LACP through external switches), 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

INPUT	OUTPUT
36 to 57 VDC via Ethernet port1 (Power over Ethernet) 12 VDC via Access port Power should not be provided simultaneously on both ports.	48 to 57 VDC – 25 Watt on Ethernet port2 (PoE – software controlled) 12 VDC on Access port

POWER CONSUMPTION

14 Watt typical, 17.5 Watt maximum

ENVIRONMENTAL SPECS

OPERATING TEMPERATURE	STORAGE TEMPERATURE	HUMIDITY, IP RATING
-40° to 60°C (-40° to 140° Fahrenheit)	-50° to 70°C (-58° to 158° Fahrenheit)	100% relative humidity, IP67

PHYSICAL SPECS

PRODUCT MODELS	DIMENSIONS PACKAGED (per unit)	DIMENSIONS UNPACKAGED (per unit)	WEIGHT (PACKAGED)	WEIGHT (UNPACKAGED)
QB-10100-EPA	14.56 x 13.0 x 7.87 in (370 x 331 x 200 mm)	9.84 x 8.66 x 2.83 in (250 x 220 x 72 mm)	9.92 lbs (4.5 kg)	4.20 lbs (1.9 kg)
QB-10150-EPR	14.56 x 13.0 x 7.87 in (370 x 331 x 200 mm)	12 x 12 x 3.40 in (305 x 305 x 85 mm)	10.91 lbs (4.95 kg)	5.30 lbs (2.4 kg)
QB-10150-EPL	27.55 x 6.85 x 27.55 in (700 x 174 x 700 mm)	23.62 x 23.62 x 3.85 in (600 x 600 x 92 mm)	23.15 lbs (10.5 kg)	14.33 lbs (6.5 kg)

WIND LOADING

QB-101x0-EPA/EPR	200 km/h (125 mph)
QB-10150-EPL	180 km/h (112.5 mph)

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

- One Tsunami® QB-10100-LNK with two N-type surge protected connectors (Two QB-10100-EPA)
  Or One Tsunami® QB-10150-LNK with integrated 22 dBi dual polarized antenna (Two QB-10150-EPR)
  Or One Tsunami® QB-10150-LKL with integrated 28 dBi dual polarized antenna (Two QB-10150-EPL)
- Two power injector and country specific power cord
- Two Connector weatherproofing kit (Includes all recommended weatherproofing material)
- Two Wall / Pole mounting kit
- Two Antenna alignment (RJ11) dongle
- Two Grounding kit
- Two Quick Installation Guide

MTBF & WARRANTY

MTBF over 250 000 hours & 2-year warranty with ServPak Extended Support available.