Tsunami Quickbridge® 10250 BeamX Series

Simplifying Deployment of High Bandwidth Services

Designed for Easy and Cost Effective Installation

The Tsunami Quickbridge®10250 BeamX radios speed deployment of point to point networks by eliminating the complicated and time-consuming antenna alignment process. The intelligent beam steering technology first used in our Multi-point Base station, the MP-10250-BSX has been adapted to enable easy and cost-effective installation. Now a rough alignment between endpoints is enough for the unit to take control of the setup, as the Quickbridge®10250 manages, and maintains the fine tuning for optimum Signal to Noise Ratio.

In non-Line Of Sight (nLOS) configurations, the beam steering technology comes into its own, enabling alignment optimization, even when reflecting the beam off a wall situated between endpoints.

The always-on BeamX intelligence ensures the link remains optimized to take full advantage of the systems high throughput capability.

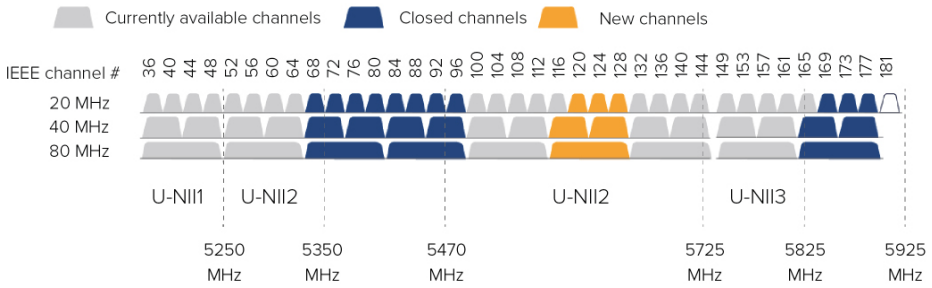
The BeamX solution combined with the secondary look-ahead scan radio improves performance even in high RF interference environments.

Fast, Secure and Flexible

- Point to Point link that delivers up to 866 Mbps data rate and covers distances up to 10 miles (16 km)
- AES 128 encryption, Radius authentication, and highly-secure remote management via SSL/TLS1.2, SSH, and SNMPv3
- Service flow based QoS with deep packet inspection (DPI) to ensure critical data arrives with priority
- Built-in feature-rich network protocols for IPv4 and IPv6 bridging, routing and gateway functionality

Proxim SmartScan™

- Performs background analysis of the full RF spectrum and creates channel availability tables to allow an immediate switch to a free channel in case of weather radar detection or interference
- By removing the initial transmission delay, SmartScan makes DFS channel more efficient
- It also opens access to the 5.600–5.650 GHz sub-band and enables effective use of up to 355 MHz of DFS spectrum



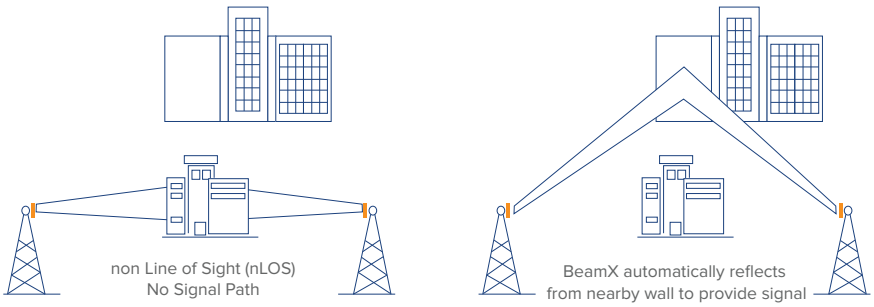
About Proxim Wireless

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.

BeamX™ Antenna

- Smart antenna delivering a 17° beam that electronically steers itself to the remote end point over a 60° sector, to limit interference from nearby RF sources
- BeamX QB speeds up deployment by removing the antenna alignment phase. Roughly aim at the remote end, and the BeamX technology does the fine-tuning, optimizing SNR
- In urban nLOS conditions, BeamX QB finds the right reflection on a nearby wall or building to facilitate connectivity



Rugged and Reliable

The Tsunami Quickbridge®10250 BeamX is Designed for harsh environments, and is fully IP67 rated, and will deliver years of reliable service in conditions that include, high winds, high salt, and high-temperature extremes.

Key Technologies

The Tsunami Quickbridge®10250 BeamX device supports the following features for applications that include last mile access or video surveillance, both of which need prioritized and continuous high-speed broadband wireless access:

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.

Proxim SmartConnect™

Delivering exceptional performance in noisy RF locations by combining a beam steering antenna with a secondary look ahead scan radio to seek, manage, and select the best channel.

Specifications

PRODUCT MODELS		PART NUMBERS
QB-10250-LKX	Tsunami QB 10250 EndPoint, 867 Mbps, MIMO 2x2, BeamX antenna, SmartScan radio	902-00903 QB-10250-LKX-US 902-00905 QB-10250-LKX-WD
INTERFACES		
WIRED ETHERNET WIRELESS PROTOCOL	Two auto MDI-X RJ45 10/100/1000Mbps Ethernet (Port #1 with PoE in & Data, Port #2 with PoE out & Data) WORP® (Wireless Outdoor Router Protocol)	
RADIO & TX SPECS		
MIMO MODULATION FREQUENCY CHANNEL SIZE DATA RATE TX POWER TX POWER CONTROL	2x2:2 and 0x2:2 (scan radio) OFDM with BPSK, QPSK, QAM16, QAM64, QAM256 4.900 – 5.850 GHz (Subject to Country Regulations) 80 MHz, 40 MHz and 20 MHz 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	

	80 MHz	40 MHz	20 MHz	SCAN RADIO
TX POWER	MCS0: 28 dBm	MCS0: 28 dBm	MCS0: 29 dBm	N/A
	MCS9: 21 dBm	MCS9: 22 dBm	MCS8: 25 dBm	
RX SENSITIVITY (Per=10%)	MCS0: -89 dBm	MCS0: -93 dBm	MCS0: -94 dBm	N/A
	MCS9: -68 dBm	MCS9: -71 dBm	MCS8: -74 dBm	
THROUGHPUT	Up to 672 Mbps	Up to 324 Mbps	Up to 137 Mbps	N/A
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 - Integrated 2x2 MIMO Beam Steering Antenna:	
Beam Width Receive Gain Transmit Gain	17° spanning over ± 30° sector 16 dBi (11 dBi before 5.150 GHz) 20 dBi (11 dBi before 5.150 GHz)
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	
Asymmetric Bandwidth Control Packet Classification Capabilities Scheduling	Asymmetric UL/DL committed and maximum information rate per service flow 802.1p priority, IPTOS, VLAN ID, IP addresses, ports, Ethernet addresses, IP protocol, and EtherType Best Effort, Real Time Polling Services
NETWORK	
MODES IP STACK GATEWAY FEATURES VLAN	Bridging (support LACP through external switches), 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	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		
	30 Watt typical, 40 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	200 km/h (125 mph)
PHYSICAL SPECS	**DIMENSIONS PACKAGED**	**DIMENSIONS UNPACKAGED**	**WEIGHT (PACKAGED)**	**WEIGHT (UNPACKAGED)**
QB-10250-LKX	18.46 x 7.05 x 21.57 in (469 x 179 x 548 mm)	14 x 14 x 3.40 in (371 x 371 x 85 mm)	13.67 lbs (6.2 kg)	7.27 lbs (3.3 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				
	• One Tsunami® QB-10250-LKX with integrated BeamX antenna and scan radio • 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			