Designed for Easy and Cost Effective Installation

The 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 Multipoint 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 urban nLOS conditions, BeamX QB can help find the right reflection angle from a nearby wall or building to facilitate connectivity.

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 (Upgradable to AES 256), 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™

- Performing a continuous background analysis of the full RF spectrum and creating channel availability tables to allow an immediate switch to an optimal channel in case of weather radar detection or interference
- By removing the initial transmission delay, SmartScan makes DFS channel use 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
**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

![Diagram](image-url)

**Rugged and Reliable**

The 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 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.

**Multi-Language Support**

Web Interface available in English, French, Spanish and Chinese
## Specifications

### PRODUCT MODELS

<table>
<thead>
<tr>
<th>PRODUCT MODELS</th>
<th>PART NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB-10250-LKX</td>
<td>Tsunami QB 10250 EndPoint, 867 Mbps, MIMO 2x2, BeamX antenna, SmartScan radio</td>
</tr>
<tr>
<td></td>
<td>902-00903</td>
</tr>
<tr>
<td></td>
<td>QB-10250-LKX-US</td>
</tr>
<tr>
<td></td>
<td>902-00905</td>
</tr>
<tr>
<td></td>
<td>QB-10250-LKX-WD</td>
</tr>
</tbody>
</table>

### LICENSE UPGRADES

<table>
<thead>
<tr>
<th>LICENSE UPGRADES</th>
<th>Tsunami QB 10200 Link, AES 128 to AES 256 license upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>997-00051</td>
</tr>
</tbody>
</table>

### INTERFACES

**WIRELESS PROTOCOL**

- Tsunami QB 10250: 867 Mbps, MIMO 2x2, BeamX antenna, SmartScan radio
- Tsunami QB 10200: 867 Mbps, MIMO 2x2, BeamX antenna, SmartScan radio

### RADIO & TX SPECS

- **MIMO**: 2x2 and 0x2-2 (scan radio)
- **MODULATION**: OFDM with BPSK, QPSK, QAM16, QAM64, QAM256
- **FREQUENCY**: 4.900 – 5.850 GHz (Subject to Country Regulations)
- **CHANNEL SIZE**: 80 MHz, 40 MHz and 20 MHz
- **DATA RATE**: MCS 0 to 9 with Dynamic Data Rate Selection
- **TX POWER**: 0 – 27 dB, in 1 dB steps. Automatic TPC with configurable EIRP limit
- **TX POWER CONTROL**: MIMO 2x2: 28 dBm, MIMO 0x2: 28 dBm

### TX POWER (dual RF)

<table>
<thead>
<tr>
<th>TX POWER (dual RF)</th>
<th>80 MHz</th>
<th>40 MHz</th>
<th>20 MHz</th>
<th>SCAN RADIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCS0: 28 dBm</td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>MCS9: 21 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RX SENSITIVITY (Per=10%)</td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>MCS0: -89 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCS0: -93 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCS0: -94 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCS9: -68 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCS9: -71 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MCS9: -74 dBm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THROUGHPUT (RFC 2544)</td>
<td>Up to 672 Mbps</td>
<td>Up to 324 Mbps</td>
<td>Up to 137 Mbps</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 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**: 17° spanning over ± 30° sector
- **Receive Gain**: 16 dB (11 dB before 5.150 GHz)
- **Transmit Gain**: 20 dB (11 dB before 5.150 GHz)

### MANAGEMENT

**REMOTE**

- Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3
- Syslog, sFlow™ agent, SNMPv3, and local time, Spectrum analyzer

**OTHER**

- Multi-Language Support: Web Interface available in English, French, Spanish, and Chinese

### SYNCHRONIZATION

- Pass-through SyncE and Precision Time Protocol (IEEE 1588v2) Ethernet Synchronization

### SECURITY

**ENCRYPTION**

- AES 128, upgradeable to AES 256
- 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**

- Bridging (support LACP through external switches), Routing (RIP v2 and IP tunneling)
- IPv4 and IPv6 simultaneously
- DHCP Server & relay, NAT with Standard ALGs, PPPoE end point with Proxy DNS
- 802.1Q: Management VLAN, Transparent, Access, Trunk and Mixed mode. QoS double tagging

**IP STACK**

- IPv4 and IPv6 simultaneously

**GATEWAY FEATURES**

- Bridging (support LACP through external switches), Routing (RIP v2 and IP tunneling)
- IPv4 and IPv6 simultaneously
- DHCP Server & relay, NAT with Standard ALGs, PPPoE end point with Proxy DNS
- 802.1Q: Management VLAN, Transparent, Access, Trunk and Mixed mode. QoS double tagging

### POWER

<table>
<thead>
<tr>
<th>POWER INPUT</th>
<th>POWER OUTPUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 to 57 VDC via Ethernet port</td>
<td>48 to 57 VDC – 25 Watt on Ethernet port</td>
</tr>
<tr>
<td>12 VDC via Access port</td>
<td>12 VDC on Access port</td>
</tr>
</tbody>
</table>

- Power should not be provided simultaneously on both ports.
### POWER CONSUMPTION

30 Watt typical, 40 Watt maximum

### ENVIRONMENTAL SPECS

<table>
<thead>
<tr>
<th>OPERATING TEMPERATURE</th>
<th>STORAGE TEMPERATURE</th>
<th>HUMIDITY - IP RATING</th>
<th>WIND LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>-40º to 60ºC (-40º to 140º Fahrenheit)</td>
<td>-50º to 70ºC (-58º to 158º Fahrenheit)</td>
<td>100% relative humidity - IP67</td>
<td>200 km/h (125 mph)</td>
</tr>
</tbody>
</table>

### PHYSICAL SPECS

<table>
<thead>
<tr>
<th>QB-10250-LKX</th>
<th>DIMENSIONS PACKAGED</th>
<th>DIMENSIONS UNPACKAGED</th>
<th>WEIGHT (PACKAGED)</th>
<th>WEIGHT (UNPACKAGED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.46 x 7.05 x 21.57 in (469 x 179 x 548 mm)</td>
<td>14 x 14 x 3.40 in (371 x 371 x 85 mm)</td>
<td>13.67 lbs (6.2 kg)</td>
<td>7.27 lbs (3.3 kg)</td>
<td></td>
</tr>
</tbody>
</table>

### 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

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