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.

Bandwidth licensed to support 25 and 50 Mbps throughput options.

Proxim Wireless is a leader and an early innovator in wireless technology providing high-speed, long-range broadband wireless solutions. Tsunami Quickbridge® 835 series is a Point-to-Point (PtP) wireless backhaul solution, designed to address cost sensitive customers who need a lower throughput offering in a carrier class product.

With this complete “Hop-in-a-Box” solution delivering up to 50 Mbps throughput, deployments of all sizes will enjoy a quick return on investment.

The QB 835 supports excellent spectrum efficiency thanks to Proxim ClearConnect™ suite of different techniques all working together to ensure robust and reliable radio communications in noisy deployments. In addition with Proxim’s WORP®, a highly evolved prioritization platform tailored to deliver voice, video and data applications, Tsunami Quickbridge® 830 series satisfies carriers, wireless service providers and Government organizations which require reliable, cost optimized high performance wireless backhaul.

World Class Performance

- Features a very small form factor and an outdoor rated IP67 Metal enclosure
- Comes with 15 dBi integrated antenna
- 25 Mbps (license upgradable to 50 Mbps) or 50 Mbps of throughput
- Provides flexible channel planning with support for 4.900 to 5.000 GHz (L mask) and 5.150 - 5.925 GHz
- Comes with a 2x2 MIMO high power radio capable of 26 dBm combined transmit power
- Allows flexible bandwidth allocation for service tiers
- Spectrum analysis feature displays interferers allowing users to select a cleaner channel with less interference.

All-in-One Link with Security Features

- Built-in feature rich network protocols for Bridging and Routing
- Advanced encryption protects over-the-air transmission via AES-128
- Radio mutual authentication eliminates unauthorized use of the system by rogue End Point and man-in-the middle attacks
- MAC, Ether type, IP address packet filtering provides granular network security
- Uses Proxim’s Wireless Outdoor Routing Protocol (WORP®) to prevent snooping
- Features highly-secure remote management via SSL, SSH and SNMPv3

Cost Effective and Ease of Installation for Quick Return on Investment

- Low-cost bundle including both radio and mounting kit provides the industry’s most aggressive price point, enabling any deployment to enjoy a quick return on investment
- License-free frequency bands worldwide provide reliable wireless broadband without the high cost of licensed frequencies
- Comes as a complete “Hop-In-A-Box” compact outdoor form factor offering unprecedented ease of installation
- Simplified web interface to optimized link deployment. Advanced detailed interface is still accessible if needed.
- Non Line-of-Sight capability provided by Advanced Orthogonal Frequency Division Multiplexing (OFDM) along with 2x2 MIMO eases deployment in challenging areas.
Specifications

**PRODUCT MODELS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB-835-LNK-25</td>
<td>Tsunami® QB 835 Link, 25 Mbps (upgradable to 50 Mbps), MIMO 2x2, 15dBi antenna (Two QB-835-EPR-25)</td>
</tr>
<tr>
<td>QB-835-LNK-50</td>
<td>Tsunami® QB 835 Link, 50 Mbps, MIMO 2x2, 15dBi antenna (Two QB-835-EPR-50)</td>
</tr>
</tbody>
</table>

**PART NUMBERS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Number</th>
<th>Model</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>QB-835-LNK-50</td>
<td>902-00817 QB-835-LNK-50-US</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INTERFACES**

**WIRED ETHERNET**

One auto MDI-X RJ45 10/100Mbps Ethernet with PoE in WORP® (Wireless Outdoor Router Protocol)

**WIRELESS PROTOCOL**

WORP® (Wireless Outdoor Router Protocol)

**RADIO & TX SPECS**

<table>
<thead>
<tr>
<th>MIMO</th>
<th>2x2 MIMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODULATION</td>
<td>OFDM with BPSK, QPSK, QAM16, QAM64</td>
</tr>
<tr>
<td>FREQUENCY</td>
<td>4.900 – 5.925 GHz (Subject to Country Regulations)</td>
</tr>
<tr>
<td>CHANNEL SIZE</td>
<td>40 MHz, 20 MHz, 10 MHz*, 5 MHz* channel bandwidths</td>
</tr>
<tr>
<td>DATA RATE</td>
<td>MCS 0 to 15 for High Throughput mode (6.5 – 300 Mbps) with Dynamic Data Rate Selection</td>
</tr>
<tr>
<td>TX POWER</td>
<td>BPSK, QPSK, 16-QAM and 64-QAM for legacy mode (6Mbps - 54Mbps)</td>
</tr>
<tr>
<td>TX POWER CONTROL</td>
<td>Up to 26 dBm (dual chain)</td>
</tr>
</tbody>
</table>

**RX SENSITIVITY**

<table>
<thead>
<tr>
<th>Channel Size</th>
<th>40 MHz</th>
<th>20 MHz</th>
<th>10 MHz</th>
<th>5 MHz</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCS 0</td>
<td>-88 dBm</td>
<td>-92 dBm</td>
<td>-93 dBm</td>
<td>-94 dBm</td>
</tr>
<tr>
<td>MCS 7</td>
<td>-72 dBm</td>
<td>-74 dBm</td>
<td>-75 dBm</td>
<td>-77 dBm</td>
</tr>
<tr>
<td>MCS 8</td>
<td>-88 dBm</td>
<td>-91 dBm</td>
<td>-93 dBm</td>
<td>-94 dBm</td>
</tr>
<tr>
<td>MCS 15</td>
<td>-69 dBm</td>
<td>-71 dBm</td>
<td>-72 dBm</td>
<td>-75 dBm</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 15 dBi dual Polarized (H+V) panel antenna (12 dBi before 5.000 GHz and 14 dBi beyond 5.850 GHz)

**MANAGEMENT**

REMOTE
- Telnet and SSH
- Web GUI and SSL
- TFTP
- SNMPv3

OTHER
- SNMP v1-v2c-v3
- Syslog
- sFlow® agent
- SNTP and local time
- Spectrum analyzer

**SYNCHRONIZATION**

Synchronize internal clock to Pulse Per Second signal recieved from either GPS module connected to RJ11 serial port or Ethernet Synchronization module connected to RJ45 ethernet port

**SECURITY**

ENCRYPTION
- AES-CCM 128 bits

AUTHENTICATION
- Internal MAC Address Control List, Radius based Authentication (with VLAN and GoS provisioning)

GoS
- Asymmetric Bandwidth Control
- Packet Classification Capabilities
- Scheduling
  - Uplink and Downlink CIR Control “committed information rate” per service flow
  - Uplink and Downlink MIR Control “maximum information rate” per service flow
  - 802.1D/802.1Q/802.1p priority, IPTOS, VLAN ID, IP source/destination address, source/destination port, Ethernet source/destination address, IP protocol, and Ethertype
- Best Effort, Real Time Polling Services

**NETWORK**

MODES
- Bridging, Routing (RIP v2 and IP tunneling)
- DHCP Server & relay, NAT with Std ALGs
- 802.1Q: Management VLAN. Transparent, Access, Trunk and Mixed mode. QinQ double tagging

**POWER SUPPLY**

Via provided PoE Injector

**POWER CONSUMPTION**

6 Watt typical (15 Watt max)

**ENVIRONMENTAL SPECS**

<table>
<thead>
<tr>
<th>OPERATING TEMPERATURE</th>
<th>STORAGE TEMPERATURE</th>
<th>HUMIDITY - Water &amp; Dust Proof</th>
<th>WIND LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>-30º to 50ºC (-22º to 122º Fahrenheit)</td>
<td>-55º to 70ºC (-67º to 158º Fahrenheit)</td>
<td>Max 100% relative humidity (non-condensing)</td>
<td>180 km/h (112 mph)</td>
</tr>
<tr>
<td>Cold start at -20ºC (-4º Fahrenheit)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICAL SPECS</td>
<td>DIMENSIONS PACKAGED</td>
<td>DIMENSIONS UNPACKAGED</td>
<td>WEIGHT (PACKAGED)</td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------</td>
<td>-----------------------</td>
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</tr>
<tr>
<td></td>
<td>13.97 x 8.86 x 3.46 in (355 x 225 x 88 mm)</td>
<td>4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm)</td>
<td>4.9 lbs (2.225 Kg)</td>
</tr>
</tbody>
</table>

**SAFETY STANDARDS**

UL 60950-1/22, CAN/CSA-C22.2 No. 60950-1/22, IEC 60950-1/22, EN 60950-1/22

**PACKAGE CONTENTS**

- One Tsunami® QB-835-LNK-25/50 with integrated antenna (Two Tsunami® QB-835-EPR-25/50)
- Two 20 W power injector and country specific power cord
- Two Connector weatherproofing kit (Includes all recommended weatherproofing material)
- Two Grounding kit
- Two basic Pole mounting kit
- Two Quick Installation Guide

**MTBF & WARRANTY**

MTBF over 350,000 hours & 2-year warranty with ServPak Extended Support available