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.

Bandwidth licensed to support 50 and 100 Mbps throughput options.

The compact and robust form factor of Tsunami Quickbridge® 825 is an ideal solution for urban wireless backhaul. It is eminently suitable for discrete mounting in city streets and offers high reliability for the connection of Video Surveillance, traffic monitoring and traffic light management systems.

With excellent spectrum efficiency and a highly evolved prioritization platform tailored to deliver voice, video and data applications, Tsunami Quickbridge® 825 satisfies carriers, wireless service providers and Government organizations with requirements for reliable cost optimized high performance wireless backhaul.

World-class Performance

- Features a very small form factor and an outdoor rated IP67 Metal enclosure available with 15 dBi integrated antenna
- 50 Mbps (license upgradable to 100 Mbps) or directly 100 Mbps of throughput with maximum data rates of 300 Mbps
- 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 transmit power
- Allows flexible bandwidth allocation for service tiers
- Spectrum analysis feature helps to study frequency bands for interference, and select a relatively low interference channel

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
- Synchronization ready to optimize channel usage of collocated link
Specifications

<table>
<thead>
<tr>
<th>PRODUCT MODELS</th>
<th>PART NUMBERS</th>
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<tbody>
<tr>
<td>QB-825-LNK-50²</td>
<td>902-00638 QB-825-LNK-50²-US</td>
</tr>
<tr>
<td>QB-825-LNK-100</td>
<td>902-00637 QB-825-LNK-50²-WD</td>
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<td>QB-825-LNK-100</td>
<td>902-00591 QB-825-LNK-100-US</td>
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<tr>
<td>QB-825-LNK-100</td>
<td>902-00590 QB-825-LNK-100-WD</td>
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INTERFACES

Wired Ethernet Wireless Protocol
One auto MDI-X RJ45 10/100/1000Mbps Ethernet with PoE in WORP® (Wireless Outdoor Router Protocol) or WORP sync

Radio & TX Specs

MIMO
2x2 MIMO

Modulation
OFDM with BPSK, QPSK, QAM16, QAM64

Frequency
4.900 - 5.925 GHz (Subject to Country Regulations)

Channel Size
40 MHz, 20 MHz, 10 MHz*, 5 MHz* channel bandwidths

* DFS availability is country dependent, check the User Guide

Data Rate
MCS 0 to 15 for High Throughput mode (6.5 – 300 Mbps) with Dynamic Data Rate Selection

BPSK, QPSK, 16-QAM and 64-QAM for legacy mode (6Mbps - 54Mbps)

Tx Power
Up to 26 dBm (dual chain)

0 – 15 dB, in 0.5 dB steps. Automatic TPC with configurable EIRP limit

Channel Size  40 MHz  20 MHz  10 MHz  5 MHz
Rx Sensitivity (PER=10⁻⁶)
MCS 0  -88 dBm  -92 dBm  -93 dBm  -94 dBm
MCS 7  -72 dBm  -74 dBm  -75 dBm  -77 dBm
MCS 8  -88 dBm  -91 dBm  -93 dBm  -94 dBm
MCS 15 -69 dBm  -71 dBm  -72 dBm  -75 dBm

Other
Dynamic Channel Selection (DCS) based on interference detection, Dynamic Frequency Selection (DFS) based on radar signature Automated Transmit Power Control (ATPC) with EIRP limit support

Antenna
QB-825-EPR-50² and QB-825-EPR-100
Integrated 15 dBi dual Polarized (H+V) panel antenna (12 dBi before 5.000 GHz and 14 dBi beyond 5.850 GHz)

Management

Local
RS-232 serial (RJ11 to DB-9 dongle provided)

Remote
Telnet and SSH, Web GUI and SSL, TFTP, SNMPv3

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

Security

Encryption Authentication
AES-CCM 128 bits Internal MAC Address Control List, Radius based Authentication

QoS
Asymmetric Bandwidth Control
Uplink and Downlink CIR Control “committed information rate” per service flow Uplink and Downlink MIR Control “maximum information rate” per service flow

Packet Classification
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

Capabilities Scheduling
Best Effort, Real Time Polling Services

Network

Mode Stack Throughput
Bridging (support LACP through external switches), Routing (RIP v2 and IP tunneling) IPv4 and IPv6 simultaneously

Gateway Features
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 or directly from 12 VDC source through serial port

### POWER CONSUMPTION
6 Watt typical (15 Watt max)

### ENVIRONMENTAL SPECS

<table>
<thead>
<tr>
<th></th>
<th>OPERATING TEMPERATURE</th>
<th>STORAGE TEMPERATURE</th>
<th>HUMIDITY - Water &amp; Dust Proof</th>
<th>WIND LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-40° to 55°C (-40° to 131° Fahrenheit)</td>
<td>-55° to 70°C (-67° to 158° Fahrenheit)</td>
<td>Max 100% relative humidity (non-condensing) - IP67</td>
<td>180 km/h (112 mph)</td>
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### PHYSICAL SPECS

<table>
<thead>
<tr>
<th></th>
<th>DIMENSIONS PACKAGED</th>
<th>DIMENSIONS UNPACKAGED</th>
<th>WEIGHT (PACKAGED)</th>
<th>WEIGHT (UNPACKAGED)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11.81 x 10.83 x 5.31 in (300 x 275 x 135 mm)</td>
<td>4.96 x 8.62 x 2.58 in (126 x 219 x 65.5 mm)</td>
<td>7.27 lbs (3.3 Kg)</td>
<td>2.1 lbs (0.950 kg)</td>
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### 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-825-LNK-50° / 100 with integrated antennas (Two Tsunami® QB-825-EPR-50° / 100)
- Two 32 W power injector with country specific power cord
- Two Wall / Pole mounting kit
- Two Connector weatherproofing kit (Includes all recommended weatherproofing material)
- Two Serial (RJ-11 to DB9) dongle
- Two Grounding kit
- Two Quick Installation Guide

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