Tsunami series 8000

Solutions/Quotation guide : November 2013 :

✔ Transition from 8100 to 8200
  ✔ High power radio version
  ✔ All 8000 series products are fully interoperable
  ✔ Improved reliability with higher quality components

✔ New Tsunami 825
  ✔ QB-825-LNK-50 (Page 6) and MP-825-CPE-50 (Page 13)
  ✔ Compact and Robust (IP67 aluminum enclosure)
  ✔ A complete 825 presentation is available upon request or more information on www.proxim.com

✔ Version world units (WD) are available for immediate shipment, ETSI (European) versions in Q1 2014.

Q4 2013

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Point to Point : Tsunami Quickbridge 8100/8200

All Tsunami 8100 products comply with the new ETSI EN 301 893 v1.7.1 necessary from January 2014 and comply with the ETSI EN 302 502 for 5.8Ghz.
The **QB 8150-LNK-WD** / **QB 8250-LNK-WD**: Included in the kit:

- 2 units (Point A and B) with integrated antennas (23 dBi)
- 2 * mounting kits
- 2 * PoE gigabit injectors with UK (World) power cord
- 2 * PoE gigabit surge arrestors
- 2 * serial dongles (RJ11 to DB9)
- 2 * grounding cables
- Documentation
- 2 weather proofing kits

**Product features:**

- WORP protocol
- MiMO 2x2 technology / Antenna 23 dBi
- 300Mbps data rate
  - Max net throughput UDP - 246 Mbps 40Mhz
- Two gigabit Ethernet ports / POE
- IP 67 (Telco class)
- QB 8150-LNK-WD - Radio 21 dBm (dual Tx)
- QB8250-LNK-WD - Radio 24 dBm (dual Tx)
- Product can use both 5.4 and 5.8 Ghz
  - QB 8150-LNK-WD – 4.9-6.80 GHz
  - QB8250-LNK-WD - 4.9-5.925 GHz

**Additional accessories highly recommended:**

Surge arrestor PoE (ETH-SURGE-1G): Two additional surge arrestors are recommended to protect the network.

Ethernet cables Cat5-e STP 25, 50 or 75 m (ETH-STP-25, ETH-STP-50, ETH-STP-75).

**ServPak : level 2**
The **QB 8100-LNK / QB 8200-LNK** (Without antenna) :

 Included in the kit :

- 2 units (Point A et B) with type N connectors
- 2 * mounting kits
- 2 * PoE gigabit injectors with UK (World) power cord
- 2 * PoE gigabit surge arrestors
- 2 * serial dongles (RJ11 to DB9)
- 2 * grounding cables
- Documentation
- 2 weather proofing kits

**N.B. Ethernet (RJ45) cables are not supplied**

**Product features** :

- WORP protocol
- MiMO 2x2 and 3x3 technology
- Wide frequency range
  - QB 8100-LNK-WD - 2.272-2.512 and 4.9-6.080GHz
  - QB 8200-LNK-WD - 4.9-5.925 GHz
- 300Mbps data rate
  - Max net throughput UDP - 246 Mbps 40Mhz
- Two gigabit Ethernet ports / POE
- IP 67 (Telco class)
- QB 8100-LNK-WD - Radio 21 dBm (dual Tx)
- QB 8200-LNK-WD - Radio 24 dBm (dual Tx)
  (3 X connector N with inbuilt surge protection)

**Additional accessories highly recommended** :

2* Antennas 29 dBi (PN# PA-530-DP) – see price book for all options
4* Antenna cables (CBL-600-6-RA)
Surge arrester PoE (ETH-SURGE-1G) : Two additional surge arrestors are recommended to protect the network.
Ethernet cables Cat5-e STP 25, 50 or 75 m (ETH-STP-25, ETH-STP-50, ETH-STP-75).

**ServPak : level 2**
The **QB 8150-LNK-100-WD** : Included in the kit:

- 2 units (Point A and B) with integrated antennas (21 dBi)
- 2 * mounting kits
- 2 * PoE gigabit injectors with UK (World) power cord
- 2 * serial dongles (RJ11 to DB9)
- 2 * grounding cables
- Documentation
- 2 weather proofing kits

Attention: POE surge arrestor is NOT included in the above

*N.B. Ethernet (RJ45) cables are not supplied*

**Product features**:

- WORP protocol
- MiMO 2x2 technology
- 300Mbps data rate *(Max net throughput – 2 * 50Mbps)*
- One gigabit Ethernet ports / POE
- IP 67 (Telco class)
- Radio 21 dBm (dual Tx) / Antenna 21 dBi
- Product can use both 5.4 and 5.8 Ghz (4.9 GHz-5.8 GHz)

**Additional accessories highly recommended**:

Surge arrestor PoE (ETH-SURGE-1G) : Four additional surge arrestors are recommended to protect the network.

Ethernet cables Cat5-e STP 25, 50 or 75 m *(ETH-STD-25, ETH-STD-50, ETH-STD-75)*.

**ServPak : level 2**
New: QB-825-LNK-50
Point to Point

Version world units are available for immediate shipment with the ETSI versions available from Q1 2014.

The QB-825-LNK-50: Included in the kit:
- 2 units (Point A and B) with integrated antennas (15 dBi)
- 2 * 20W PoE injector and power cord
- 2 * Grounding cable
- 2 * connector weatherproofing kit
- 2 * basic mounting kit
- 2 * printed Quick Install Guide

N.B. Ethernet (RJ45) cables are not supplied

Product features:
- WORP protocol
- MiMO 2x2 technology
- 300Mbps data rate
  - Max net throughput 50 Mbps (TCP)
- IP 67 (Telco class)
- Radio 26 dBm (dual Tx) / Antenna 15 dBi
- Product can use both 5.4 and 5.8 GHz (5.15-5.925GHz)
- Fast Ethernet port with 802.3at PoE in
- 5 LED receive signal indicator

Additional accessories highly recommended:
Surge arrestor PoE (ETH-SURGE-1G): Additional surge arrestors (2-4) are recommended to protect the radio and network.

Ethernet cables Cat5-e STP 25, 50 or 75 m (ETH-STP-25, ETH-STP-50, ETH-STP-75).

Option: 8000-UMK: Full axis mounting kit
ServPak: level 2
Point to Point link with integrated antenna

QB-825-LNK-50

Throughput (Mbps) vs. Range (km)

- 40 MHz - 5.8 GHz FCC/Russia
- 40 MHz - 5.8 GHz ETSI
- 40 MHz - 5.4 GHz FCC/ETSI
- 20 MHz - 5.8 GHz FCC/Russia
- 20 MHz - 5.8 GHz ETSI
- 20 MHz - 5.4 GHz FCC/ETSI

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Point to Multipoint: Tsunami 8100/8200

All Tsunami 8100 products comply with the new ETSI EN 301 893 v1.7.1 necessary from January 2014 and comply with the ETSI EN 302 502 for 5.8Ghz.
Recap:

- WORP protocol / MiMO technology
- 300Mbps data rate
- Max net throughput UDP - 240Mbps/ 40Mhz
- Two gigabit Ethernet ports
- IP 67 (Telco class)
- MP-8100-BSU-WD : Radio 21 dBm (dual Tx)
  Frequencies 2.3-2.5 and 4.9-6.0GHz
- MP-8200-BSU-WD : Radio 24 dBm (dual Tx) /25.8 dBm (3 TX)
  Frequencies 4.9-5.925 GHz

MP-8100-BSU-WD/ MP-8200-BSU-WD:

Included in the kit:

- 1 unit without antenna
- 1 * mounting kit
- 1* PoE gigabit injectors with UK/Euro power cords
- 1* PoE gigabit surge arrester
- 1* serial dongles (RJ11 to DB9)
- 1 * grounding cable
- Documentation
- 3 weather proof caps (Type N)

Additional accessories highly recommended:

Antenna to be added (see latest monthly Proxim price list for antenna options)
2 x antenna cables (CBL-600-6-RA) - 3 cables for Mimo 3x3)
1x Surge arrester POE (ETH-SURGE-1G)
Ethernet cables Cat5-e STP 25, 50 or 75 m (ETH-STP-25, ETH-STP-50, ETH-STP-75).

ServPak : level 2
Recap:

- WORP protocol / MiMO technology
- 300Mbps data rate
- Max net throughput UDP: 240Mbps /40Mhz
- Two gigabit Ethernet ports / POE
- IP 67 (Telco class)
- MP-8100-SUA-WD: Radio 21 dBm (dual Tx)
  - Frequencies 2.3-2.5 and 4.9-6.0 GHz
- MP-8200-SUA-WD: Radio 24 dBm (dual Tx) /25.8 dBm (3 TX)
  - Frequencies 4.9-5.925 GHz

MP-8100-SUA-WD/ MP-8200-SUA-WD

Included in the kit

- 1 unit without antenna
- 1 * mounting kit
- 1* PoE gigabit injectors with UK/Euro power cords
- 1* PoE gigabit surge arrester
- 1* serial dongles (RJ11 to DB9)
- 1* grounding cable
- Documentation
- 3 weather proof caps (Type N)

Additional accessories highly recommended:

Antenna to be added (see latest monthly Proxim price list for antenna options)
2 x antenna cables (CBL-600-6-RA) - 3 cables for MiMO 3x3)
1x Surge arrester POE (ETH-SURGE-1G)
Ethernet cables Cat5-e STP 25, 50 or 75 m
(ETH-STP-25, ETH-STP-50, ETH-STP-75).

ServPak: level 1
Recap:
- WORP protocol / MiMO technology (antenna 23 dBi)
- 300Mbps data rate
- Max net throughput UDP - 240Mbps / 40Mhz
- Two gigabit Ethernet ports
- IP 67 (Telco class)
- MP-8100-SUR-WD : Radio 21 dBm (dual Tx) Frequencies 2.3-2.5 and 4.9-6.0 GHz
- MP-8200-SUR-WD : Radio 24 dBm (dual Tx) / 25.8 dBm (3 TX) Frequencies 4.9-5.925 GHz

Additional accessories highly recommended:
- 1x Surge arrester POE (ETH-SURGE-1G)
- Ethernet cables Cat5-e STP 25, 50 or 75m (ETH-STP-25, ETH-STP-50, ETH-STP-75).

MP-8150-SUR-WD/MP-8150-SUR-WD:
- Included in the kit
- 1 unit with antenna
- 1 * mounting kit
- 1* PoE gigabit injectors with UK/Euro power cords
- 1* PoE gigabit surge arrester
- 1* serial dongles (RJ11 to DB9)
- 1* grounding cable
- Documentation

ServPak : level 1
**Recap:**

- WORP protocol / MiMO technology
- 300Mbps data rate
  - Max net throughput – 2*50Mbps
- One gigabit Ethernet port
- IP 67 (Telco class)
- Radio 21 dBm (dual Tx) / antenna 21 dBi

**MP-8150-SUR-100 WD:**

Included in the kit

- 1 unit with antenna
- 1 * mounting kit
- 1* PoE gigabit injectors with UK/Euro power cords
- 1* serial dongles (RJ11 to DB9)
- 1 * grounding cable
- Documentation

Attention: POE surge arrestor is NOT included in the above

**Additional accessories highly recommended:**

2x Surge arrestor POE (ETH-SURGE-1G)

Ethernet cables Cat5-e STP 25, 50 or 75m (ETH-STP-25, ETH-STP-50, ETH-STP-75).

**ServPak : level 1**
New: MP-825-CPE-50
Point to Multipoint

Version world units are available for immediate shipment with the ETSI versions available from Q1 2014.

The **MP-825-CPE-50** : Included in the kit:

- 1 units with integrated antennas (15 dBi)
- 1 * 20W PoE injector and power cord
- 1 * Grounding cable
- 1 * connector weatherproofing kit
- 1 * basic mounting kit
- 1 * printed Quick Install Guide

Product features:

- WORP protocol
- MiMO 2x2 technology
- 300Mbps data rate
  - Max net throughput 50 Mbps (TCP)
- Compact and robust: IP 67 (Telco class)
- Radio 26 dBm (dual Tx) / Antenna 15 dBi
- Product can use both 5.4 and 5.8 GHz (5.15-5.925GHz)
- Fast Ethernet port with 802.3at PoE in
- 5 LED receive signal indicator

*N.B. Ethernet (RJ45) cables are not supplied*

Additional accessories highly recommended:

Surge arrestor PoE (ETH-SURGE-1G): Additional surge arrestor is recommended to protect the network.

Ethernet cables Cat5-e STP 25, 50 or 75 m (ETH-STP-25, ETH-STP-50, ETH-STP-75).

Option: 8000-UMK: Full axis mounting kit

**ServPak: level 1**
**Tsunami™ 8000 range: Hardware**

**World Class Performance**

With up to 300 Mbps data rates, the Tsunami® 8000 delivers superior wireless performance.

**NLOS and Advanced Features**

The 8000 series uses OFDM and enhanced 2x2 and 3x3 MIMO techniques to offer better RF interference mitigation and better non-line-of-sight (NLOS) support.

**Dual gigabit Ethernet ports**

Dual Gigabit Ethernet ports with PoE in/out, capable of powering 802.3af compliant devices.

**Waterproof**

IP67 rated and tested to operate under 1 meter of water for up to 30 minutes.

« Built to last! »
**Tsunami™ 8000 range : Software**

**Wireless Outdoor Routing Protocol (WORP)**

**Advanced security**

Proprietary protocol improving band traffic management and throughput

Implements AES 128 bit encryption and secure management (SSL, SSH, SNMPv3) and radius authentication

**Centralized Management**

PVNMS centralized network management system provides rapid network deployment and mobile configuration

**Integrated monitoring tools**

Iperf, Spectrum analyser, statistics: event log, sys log, SNMP trap and SFlow

**Roaming**

Allows Satellites to seamlessly roam between Base stations at speed up to 295 km/h
Proxim’s Proprietary WORP®

Wireless Outdoor Routing Protocol

- More Net Bandwidth
- More Concurrent Subscribers
- Smart Scheduling
- Dynamic Data Rate Selection (DDRS)
- Quality of Service
- Asymmetric Bandwidth Controls

For more detailed information on the advantages of WORP a white paper is available for download on the Proxim web site: www.proxim.com
Most complete wireless portfolio in the industry

- Point to Point, Point to MultiPoint, Mesh and Wireless LAN
- 30 years of wireless experience with 240,000 customers and more than 2 million units deployed worldwide

Migration of the product range to high performance solutions

- 11n for the Orinoco Wifi solutions
- High performance solutions for Pt to Pt and Pt to Mpt
  - The 8160 series offers frequency range from 5.9 to 6.4 GHz

Since the launch of the QB8150, the product is perceived as the leading Point to Point solution on the market providing unrivalled price/performance

- First company to launch high capacity Pt to Pt and Pt to Mpt solutions four years ago
  - Very feature rich, robust range of products
- The 8200 series provides more a powerful radio solution to the Proxim portfolio
- The 825 series bring a compact, robust and economical product range to the 8000 series