Unparalleled Broadband Wireless Solutions for Public Safety Applications

The Tsunami® MP.11 4954-R enables municipalities and state governments to rapidly deploy secure, reliable broadband connectivity for public safety voice, video and data applications — all through advanced broadband wireless networking. Advanced features include: WiMAX Quality of Service (QoS); roaming with seamless handoffs at speeds up to 200 km/hour and dynamic data rate selection (DDRS).

Available for ruggedized outdoor deployments, the MP.11 4954-R is capable of supporting converged voice, video and data transmission in fixed and mobile applications, bringing capabilities of the mobile WiMAX (IEEE 802.16e) standard to the 4.9 GHz licensed band now with 5/10/20 MHz channel bandwidths and scalable performance from 1.5 to 54 Mbps — all selectable via simple user interfaces.

The Tsunami MP.11 4954-R, the QuickBridge.11 4954-R, and the Orinoco Public Safety Wi-Fi Mesh Access Points (4900M) form a complete wireless product suite to rapidly build and upgrade Public Safety networks.

WiMAX QoS Provides Reliable Connectivity for Public Safety Applications

IEEE 802.16 (WiMAX) QoS provides a higher level of prioritization than any available 802.1-based schemes from currently existing products. As many as eight classes of service, with up to eight service flows per class, are supported. This is especially important for security, surveillance, dispatch streaming video and voice applications. As a result, state and local governments have better options for connectivity, managing their bandwidth more effectively and can make better, more informed decisions about their service management strategies.

Mobile Roaming Enables Application Persistence

Proxim innovation delivers mobile roaming of subscriber units between base station units. Public safety first responder networks, transportation system monitoring and telemetry, and mobile security and surveillance are now all possible with a low cost, robust system.

- Fast handoff at speeds up to 200 km per hour (120 mph) with handoff times as low as 40ms
- Customizable roaming parameter maintains minimum bandwidth required for application performance

Adaptive Wireless Network Optimizes Performance


- WORP® avoids to collision and maximizes data content with each transmission
- Dynamic Data Rate Selection automatically compensates for temporary link degradation, maintaining robust connectivity and mitigating service calls

Advanced Security Protects Privacy

Multiple security mechanisms protect highly sensitive and/or confidential data transmission.

- Weatherized enclosure allows co-location on rooftops — limiting physical access
- Proxim’s Wireless Outdoor Routing Protocol (WORP®) prevents snooping common to Wi-Fi systems
- Advanced encryption protects over-the-air transmission
- Intra-cell blocking forbids direct communication between Subscriber Units
- Mutual authentication eliminates unauthorized use by rogue SUs and man-in-the-middle attacks
- Password protection of all remote management methods

Designed for Fast Installation and Lower Maintenance Cost

Tsunami MP.11 radios incorporate hardware and software features that reduce labor costs associated with initial deployment and post-sales maintenance.

- With Peltier heating and cooling technology inside a ruggedized enclosure, the MP.11 4954-R can be deployed in extreme weather conditions
- Decrease Subscriber Unit configuration time with integrated and vertical/horizontal polarized antennas
- Eliminate guess work in locating the remote antennas with audible tone and real-time signal strength measurements
- Support for both local and remote management, removing the need for expensive on-site support

Wireless Product Portfolio

- Tsunami® 8200 Series – PtP & PtMP product line delivering 300 Mbps plus data rate
- Tsunami® .11 Series – Our best selling Point-to-point and multipoint product line
- Tsunami® GX-810 – Carrier-class IP Ethernet bridge for voice and data backhaul for service providers and enterprise applications
- ORINOCO® AP - The industry’s highest performance 802.11a/b/g/n access points

Proxim Wireless is a global pioneer of broadband wireless systems that deliver the quadruple play of video, voice, data and mobility. Regardless of the application, our end-to-end product portfolio enables partners to custom-build the wireless solution that fits customer’s specific needs. Our point-to-point wireless backhaul products are available through our extensive global channel networks.
## PRODUCT MODELS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4954-BSUR-US</td>
<td>Tsunami® MP.11 4954-R Base Station Unit with Type-N Connector</td>
</tr>
<tr>
<td>4954-SUA-US</td>
<td>Tsunami® MP.11 4954-R Subscriber Unit with Type-N Connector</td>
</tr>
<tr>
<td>4954-SUR-US</td>
<td>Tsunami® MP.11 4954-R Subscriber Unit with Integrated 21dBi Antenna</td>
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## RADIO & TRANSMISSION

- **MODULATION METHOD**: OFDM (Orthogonal Frequency Division Multiplexing)
- **FREQUENCY BAND**: Americas (FCC) 4.94-4.99 GHz (Licensed for public safety in U.S.)
- **DATA RATE**: 54, 48, 36, 24, 18, 12, 9, 6, 4.5, 3, 2.25, 1.5 Mbps
- **CHANNEL BANDWIDTH**: 10MHz (8M89W7D), 20MHz (17M8W7D)

## INTERFACES

- **WIRELESS ETHERNET**: 10/100Base-TX Ethernet (RJ-45); SUR includes integrated 21 dbi antenna
- **WIRELESS PROTOCOL**: WORP®
- **ANTENNA CONNECTOR**: Standard N-Female (BSUR & SUA)

## PHYSICAL

- **PACKAGE DIMENSIONS**:
  - **PACKAGED**: 14.6 x 13.7 x 8.2 in (370 x 348 x 208 mm)
  - **UNPACKAGED**: BSUR, SUA: 10.5 x 10.5 x 3.25 in (267 x 267 x 83 mm), SUR: 12.6 x 12.6 x 3.5 in (320 x 320 x 89 mm)

- **WEIGHT**:
  - **PACKAGED**: BSUR, SUA: 10.2 lbs (4.6 kg), SUR: 11.1 lbs (5.02 kg)
  - **UNPACKAGED**: BSUR, SUA: 6.5 lbs (2.94 kg), SUR: 7 lbs (3.17 kg)

## ENVIRONMENTAL

- **OPERATING**:
  - **TEMPERATURE**: -33° to 60°C (-27.5° to 140°F)
  - **HUMIDITY**: Max 100% relative humidity (non-condensing)

## ELECTRICAL

- **INPUT**: Voltage 110 to 250 VAC
- **OUTPUT**: Current 420 mA at 48V
- **POWER CONSUMPTION**: Maximum 20 Watt
- **POWER OVER ETHERNET**: Via RJ-45 Ethernet interface port

## MANAGEMENT

- **REMOTE**: RS-232 Serial Port (RJ11 and DB-9)
- **SNMP**: SNMPv1/v2c, MIB-II, Ethernet-like MIB, 802.3MAU, 802.11MIB, Private MIB, ORINOCO MIB, RFC 1157, RFC 1213, RFC 1463, RFC 1493, RFC 2668

## MTBF AND WARRANTY

- **MTBF**: 100,000 hours
- **WARRANTY**: 1-year on parts and labor

## PACKAGE CONTENTS

- One (1) Tsunami® MP.11 4954-BSUR with Type-N connector, or One (1) 4954-SUA Unit with Type-N connector, or One (1) 4954-SUR with 21dBi integrated antenna
- One (1) wall/pole mounting bracket
- One (1) power injector and US/CAN power cord
- One (1) Cable Termination Kit
- One (1) CD-ROM with Software and Documentation

## RELATED PRODUCTS

- Quickbridge.11 4954-R, Poe Surge Arrestor (70251), Spare Power DC Injector for MP.11 or QB.11 (69823), MP.11 System Antennas, ORINOCO Public Safety Mesh Access Points (AP-4900M), ProximVision ES NMS, ServPak (US/CAN Only), Worldwide Extended Warranty

## APPLICATIONS

- **Security and Surveillance**: Real-time transport of bandwidth intensive and high-definition IP-surveillance data from cameras located at important city and transportation infrastructure such as airports, bridges and trains.
- **Emergency First Responders**: Quickly setup and backhaul critical information such as medical data and video feeds during in-progress events.
- **Disaster Recovery**: Build out entire public safety network in hours.
- **Reliable and Secure**: Government Office Connectivity Secure and reliable connectivity between city buildings to extend main network to remote offices without expensive leased lines.