proxim wireless

Tsunami MP.11 4954-R Outdoor Base Station

High-Capacity Wireless Solutions for Public Safety

Proxim Wireless offers extremely reliable, secure, quickly and easily-deployable wireless solutions for Public Safety applications. Proxim's Public Safety product portfolio includes:

• **Tsunami MP.11 4954-R –**
  Capabilities of fixed and mobile WiMAX for public safety market

• **Tsunami QuickBridge.11 4954-R –**
  Point-to-Point Broadband Wireless system

• **Orinoco Public Safety Wi-Fi Mesh –**
  Outdoor and indoor mesh access points for edge of network

Proxim Wireless is a global provider of scalable broadband wireless networking public safety solutions. From Wi-Fi to wireless Gigabit Ethernet – our WLAN, mesh, point-to-multipoint and point-to-point products are available through our extensive global channel network.

Unparalled Broadband Wireless Solutions for Public Safety Applications

The 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 and 4900MR-LR) 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 40 ms
• Customizable roaming parameter maintains minimum bandwidth required for application performance

Adaptive Wireless Network Optimizes Performance

Using advanced OFDM technology and Wireless Outdoor Routing Protocol (WORP), MP.11 networks dynamically adapt to the ever-changing network load for optimum performance.

• WORP adapts to avoid collisions 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
• Intracell 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

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

PRODUCT MODEL	Tsunami MP.11 4954-R
4954-BSUR-US	Tsunami MP.11 4954-R Base Station Unit with Type-N Connector
4954-SUA-US	Tsunami MP.11 4954-R Subscriber Unit with Type-N Connector
4954-SUR-US	Tsunami MP.11 4954-R Subscriber Unit with Integrated 21 dBi Antenna
RADIO & TRANSMISSION	
MODULATION METHOD	OFDM (Orthogonal Frequancy 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
INTERFACES	
WIRED ETHERNET	10/100Base-TX Ethernet (RJ-45); SUR includes integrated 21 dBi antenna
WIRELESS PROTOCOL	WORP
ANTENNA CONNECTOR	Standard N-Female (BSUR & SUA)
PHYSICAL	
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	
TEMPERATURE	
OPERATING	-33° to 60°C (-27.5° to 140°F)
STORAGE	-55° to 80°C (-41° to 176°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	
LOCAL	RS-232 Serial Port (RJ11 and DB-9)
REMOTE	Telnet, Web GUI, TFTP
SNMP	SNMPv1/v2c; MIB-II; Ethernet-like MIB; 802.3MAU; 802.11MIB; Private MIB; ORiNOCO MIB; RFC 1157; RFC 1213; RFC 1643; RFC 1493; RFC 2668
MTBF AND WARRANTY	100,000 hours; 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 21 dBi 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 and AP-4900MR-LR), ProximVision™ 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.

For detailed technical specifications, please go to **http://www.proxim.com/products/MP11_BS**

PRO✗IM
wireless
Proxim Wireless Corporation
www.proxim.com