



MP.11 HS (HighSecurity) Family

Applications:

- **Highly Secure Video Surveillance**

- Provides high throughput for bandwidth-intensive, high-definition video for use in national security against intrusion and acts of violence along borders, within cities, and along transportation infrastructure such as airports, bridges, and trains

- Mobile vehicle solution to aid law enforcement with real-time viewing with handoff speeds up to 200 km per hour (120 mph)

- **Highly Secure Data Exchange**

- Provides optimal data security for financial transactions and medical information privacy

- Meets government FIPS 140-2 level 2 requirements, enabling use by a large range of agencies that require the highest security

- **VoIP**

- Secure VoIP with QoS prioritization enables high-speed mobile or static voice communications

Proxim Wireless is a global provider of end-to-end broadband wireless systems that deliver the quadruple play. From Wi-Fi to wireless Gigabit Ethernet – our WLAN, mesh, WiMAX and point-to-point products are available through our extensive global channel networks.

The Tsunami™ MP.11 HS (High Security) is Proxim's ultra-secure broadband wireless solution for wireless video, data connectivity, VoIP and mobility, combining FIPS 140-2 level 2 compliance, advanced AES-256 encryption, and secure management to meet strict U.S. Federal Government standards. Though designed to meet or exceed the security requirements of government customers, the Tsunami MP.11 HS also provides utilities and ultra-secure enterprises – including financial and healthcare institutions – with government-grade wireless security.

The Tsunami MP.11 HS line includes point-to-multipoint and point-to-point products in both indoor only and indoor/outdoor models for the 5 GHz, 2.4 GHz, and 1.8 GHz frequency bands. The MP.11 HS provides customers with the first truly integrated solution to combine advanced security features – as well as management – into a single box. And because it leverages the field-proven and reliable Tsunami MP.11, the MP.11 HS features the ease of deployment and dependability customers have come to expect from Proxim's MP.11 products.

Key Features

- Rich security
 - FIPS 140-2 Level 2 provides US Federal Governmental Standard for Cryptographic Security
 - Advanced encryption with AES-256 (FIPS 197) protects over-the-air transmission
 - Secure Management with SSH, SSL, HTTPS, and SNMPv3
- Unprecedented ease-of-installation, management and maintenance. FIPS-secure wireless links can be installed in hours with little or no training or minimal wireless experience
- Software-selectable support for 2.4 GHz (13 channels) and 5.15, 5.25, 5.47 and 5.725 GHz (80+ non-overlapping channels) bands
 - Support for 5, 10, and 20 MHz bandwidth channels
- WiMAX QoS provides higher level of prioritization with as many as eight service flows per class, which exceeds available products based upon 802.11 schemes
- Roaming with seamless handoffs at speeds up to 200 km/hour (120 mph)

New Revenue Opportunities for Protected Wireless Solutions

Ever increasing security requirements for video surveillance, identity and personal information theft, and protected monetary exchange bring opportunities to provide differentiated service offerings. With FIPS 140-2 level 2, you can be assured that encrypted data is undecipherable. And with the added protection of 256-bit AES encryption, data security is above current FIPS requirements and will meet requirements through 2010 and beyond. As a result, differentiated secure wireless services may be offered to customers that might have previously chosen wire-line solutions.

Optimized Wireless Performance and Reliability Using Adaptive Technologies

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

- Typical wireless collisions are avoided using WORP
- Dynamic Data Rate Selection automatically compensates for temporary link degradation, maintaining robust connectivity and mitigating service calls

MP.11 HS Continues the Advanced Security Protection of the MP.11 Family

Multiple security mechanisms from the MP.11 family that protect governmental, operator, residential and enterprise privacy are continued in the MP.11 HS products

- Weatherized enclosure allows for installation in harsh environments and climates
- Proxim's Wireless Outdoor Routing Protocol (WORP) prevents snooping that is common to Wi-Fi systems
- Optional Intracell blocking forbids direct communication between Subscriber Units (SUs)
- Base Station Unit (BSU) and SU mutual authentication eliminates unauthorized use of system by rogue SUs and man-in-the-middle attacks

Designed for Ease of Installation and Low Maintenance Cost

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

- Peltier heating and cooling technology inside a ruggedized enclosure enable the MP.11 HS products to be deployed in extreme weather conditions
- Software-selectable radios reduce stocking and sparing costs
- Audible tone and real-time signal strength measurement eliminates time-consuming antenna focusing and guess work
- Ultra-secure features built into a single radio eliminates the need for a security expert

Tsunami™ MP.11 HS

Technical Specifications

PRODUCT MODEL	Tsunami MP.11 HS (Operates on 2.4 or 5 GHz)
245054-BSUR	Tsunami MP.11 HS Ruggedized Base Station with POE Connectorized - supports diversity
245054-SUR	Tsunami MP.11 HS Ruggedized Subscriber Station with POE Integrated Antenna
245054-SUA	Tsunami MP.11 HS Ruggedized Subscriber Station with POE Connectorized - supports diversity
245054-BSU-S	Tsunami MP.11 HS Base Station 12 VDC - indoor or mobile use
245054-SU-S	Tsunami MP.11 HS Subscriber Station 12 VDC - indoor or mobile use
	Tsunami MP.11 HS Point-to-Point Products
245054-QB	Tsunami QuickBridge QB.11 HS high security point-to-point
RADIO & TRANSMISSION	
MODULATION METHOD	OFDM
UNLICENSED FREQUENCIES	2.4-2.4835 GHz (13 channels) Americas (FCC) 2.4-2.4835 GHz (13 channels) Europe (ETSI) 5.25-5.35 GHz (15 channels) Japan (MKK) 5.4-5.725 GHz (46 channels) Americas (FCC) 5.725-5.850 GHz (21 channels) Americas (FCC) 5.725 – 5.850 GHz (21 channels) Americas (FCC) 5.4-5.725 GHz (46 channels) Europe ETSI
LICENSED FREQUENCIES	5.1-6.08 GHz (185 channels) (Russia) 5.725-5.850 GHz (21 channels) (UK only) 5.8-5.850 GHz (9 channels) (India only)
DATA RATE	54,48,36,24,18,12,9,6,4.5,3,2.25,1.5 Mbps
PHYSICAL SPECIFICATIONS	
DIMENSIONS PACKAGED	BSUR, SUR, SUA, & QB Models - 10.5 x 10.5 x 3.25 in (267 x 267 x 83 mm) BSU-S, SU-S Models - 5.5 x 5.5 x 1 in (140 x 140 x 30 mm)
WEIGHT PACKAGED	BSUR & SUA Models - 5.5 lbs (2.49 kg) SUR & QB Models - 6 lbs (2.72 kg) BSU-S, SU-S Models - 1.1 lbs (.5 kg)
SECURITY	
FIPS CRYPTOLOGY	FIPS 140-2 Level 2 (in process with NIST)
WIRELESS ENCRYPTION	256-bit AES exceeds current requirements by NIST
SECURE WIRELESS PROTOCOL	Wireless Outdoor Protocol (WORP), Intracell blocking, BSU/SU mutual authentication
SECURE MANAGEMENT	SSL, SSH, HTTPS (see below)
MANAGEMENT	
LOCAL	RS-232 Serial Port (RJ11 and DB9)
REMOTE	SSH, SSL, Telnet, HTTPS
SNMP	SNMPv3; MIB-II, Ethernet-like MIB; 802.3MAU; 802.11MIB; Private MIB; ORINOCO MIB; RFC 1157; RFC 1213; RFC 1643; RFC 1493; RFC 2668
INTERFACES	
WIRED ETHERNET	10/100Base-Tx Ethernet (RJ-45)
WIRELESS PROTOCOL	WORP
ANTENNA CONNECTOR	BSUR & SUA Models- Standard Type-N Female BSU-S, SU-S Models- Dual, SMA female
POWER / ENVIRONMENT	
INPUT TO POE INJECTOR	110/250 VAC
OUTPUT FROM POE INJECTOR	Current 420 mA at 48VDC
POWER CONSUMPTION	Maximum 20 Watt
POWER OVER ETHERNET	Via RJ-45 Ethernet Interface Port
OPERATING TEMPERATURE	-30° to +60° C (Outdoor models: operating) -55° to +80° C (Outdoor models: storage) 0° to +50° C (Indoor models: operating) -55° to +80° C (Indoor models: storage)
HUMIDITY	BSUR, SUA, SUR, & QB.11 HS (100% Condensing)

For detailed technical specifications, please go to http://www.proxim.com/products/mp11_hs/

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