



Tsunami™ Mini 8100 embedded module

End-to-End Broadband Wireless Product Portfolio

Proxim Wireless offers the industry's most complete suite of outdoor broadband wireless access products. This portfolio includes:

- **Tsunami™ MP-8100** – Proxim's Point-to-Multipoint Product line delivering wireless performance in excess of 4G products on the market today.
- **Tsunami™ MP.11** – Proxim's best selling Point-to-Multipoint product line for global markets
- **MeshMAX** – Our Tsunami™ MP.11 and ORiNOCO® access point all in one compact outdoor solution
- **ORiNOCO® AP** - World-class performing enterprise 11n access points
- **Tsunami™ MP.16** – WiMAX for the 3.5 - 3.65 GHz frequency band

Proxim Wireless is a global pioneer of end-to-end broadband wireless systems that deliver quadruple play services. 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™ Mini 8100 series is a family of highly integrated full-featured Proxim's flagship Tsunami™ Multi-Point Subscriber Units in a compact form factor, which provide unmatched ease of integration for OEMs to rapidly enable outdoor wireless connectivity to their products. These FIPS 140-2 certifiable embedded modules provide military-grade security and comprehensive frequency range from 2.3-2.5GHz and 4.9-6.1GHz, and they are ideal for integrating into various radio-in-a-system solutions for military, video surveillance cameras, and vehicular communication applications.

Key Features and Benefits

- Smaller form factor (4"x3") makes integration easier and provides time-to-market advantage for OEMs.
- Configurable operating modes - Multi-Point Subscriber, WLAN Access Point and Client, to meet the requirements of variety of applications.
- Flexible channel bandwidths of 5/10/20/40MHz for effective spectrum management
- Wide range of frequency selection in 2.3-2.5GHz and 4.9-6.1GHz bands to cater worldwide regulatory domains
- Supports 1.8 and 4.4 GHz military frequencies in conjunction with Proxim's frequency converter
- Optional on board security processor for AES-256 bit encryption
- FIPS-140-2 certifiable
- Transmit Power up to 24dBm
- Powered from 12V DC
- 10/100 Ethernet and Serial Interface
- RoHS compliant

Target Markets

- Federal SI's – Military Applications
- OEM Video Camera manufacturers
- Portable / vehicular / mobile radio communications
- Governments with requirement for FIPS 140-2 certifiable products
- Secure banking applications
- POS terminals



PRODUCT MODEL	Tsunami mini 8100 Series
MP-8100-MINI-SUA	Tsunami 8100 Mini – Embedded 2x2 MIMO subscriber unit with MMCX connectors
MP-8100-MINI-SUA-HS	Tsunami 8100 HS Mini – High security embedded 2x2 MIMO subscriber unit with MMCX connectors
RADIO & TRANSMISSION	
CONFIGURATION	2x2 MIMO
MODULATION METHOD	OFDM – Orthogonal Frequency Division Multiplexing
FREQUENCIES	2.3-2.5GHz, 4.9 GHz – 6.1 GHz (Subject to Country regulations)
CHANNEL BANDWIDTH	5MHz, 10MHz, 20MHz and 40MHz
DATA RATE	Up to 300 Mbps
MAX TRANSMIT POWER	24dBm
PHYSICAL SPECIFICATION	
DIMENSION	4 in x 3 in (101.6 mm x 76.2 mm)
WEIGHT	69 grams
PCB TYPE	8-layer FR4
LED INDICATORS	4 LEDs for status indication
MOUNTING	4 corner holes of 3.5mm diameter at 2.7 inch and 3.7 inch center to center distance
SECURITY	
CRYPTOLOGY	FIPS 140-2 certifiable
WIRELESS ENCRYPTION	<ul style="list-style-type: none"> ▪ 256-bit AES (Optional) ▪ 128-bit AES
SECURE WIRELESS	<ul style="list-style-type: none"> ▪ Wireless Outdoor Routing Protocol (WORP) ▪ Mutual authentication
MANGEMENT	
LOCAL	RJ-11 serial interface
REMOTE	SSH, SSL, Telnet, HTTPS
SNMP	SNMP v1-v2c-v3, RFC-1213, RFC-1215, RFC-2790 RFC-2571, RFC-3412, RFC-3414 802.3MAU; 802.11MIB and ORiNOCO MIB
S/W UPGRADATION	Remote upgradeable through TFTP or HTTP
INTERFACES	
WIRELESS ETHERNET	100 Base-Tx Ethernet (RJ-45 connector placement option)
WIRELESS PROTOCOL	Wireless Outdoor Routing Protocol (WORP)
ANTENNA CONNECTOR	2x2 MIMO antenna support
POWER / ENVIRONMENT	
POWER OPTION	Powered by 12V DC
POWER CONSUMPTION	Maximum 13.8 Watts, Typical 7 Watts
STORAGE TEMPERATURE	-20°C to 75°C
OPERATING TEMPERATURE	0°C to 55°C
HUMIDITY	95% (non condensing)
SAFETY	RoHS compliant