Tsunami® GX800

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® 8100 – Proxim's unlicensed PtP & PtMP Product line delivering wireless performance in excess of 4G products on the market today.*

• *Lynx.GX® – Cellular voice and data backhaul, up to DS3 interface*

• *Tsunami.GX® – Carrier-class IP Ethernet bridge for voice and data backhaul for service providers and enterprise applications*

• *QuickBridge® – Complete "hop-in-a-box" Ethernet bridge for campus and small business network.*

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.

Tsunami® GX800 is a high speed Point-to-Point (PtP) licensed microwave product capable of operating in 6–23 GHz licensed bands with more than 600Mbps aggregate throughput capacity, supporting an array of user configurable channel bandwidths from 7-56 MHz. The product has an extremely small foot print and comes in a split-mount design constituting of a compact indoor unit (IDU) and outdoor unit (ODU) that are a snap to install.

The Tsunami® GX800 Series is an outcome of Proxim's extensive RF technical expertise and years of broadband wireless access products experience. The GX800 Licensed Point-to-Point products are technically advanced, highly reliable and very cost effective.

The Tsunami® GX800 uses highly advanced radio technology. The product is designed for PDH and Wireless Broadband applications, utilizing modulation schemes from QPSK to 256QAM and high data rates. The product supports High Transmit Power Levels with up to +27dBm for certain frequency bands. The product is optimized for high speed Ethernet networking and for transmission of standard E1 or E3 channels.

Tsunami® GX800 is not just another typical PDH platform. It houses a unique innovative proprietary packet system with different priority for each transmission channel. This advanced prioritization platform intelligently allocates transmission capacity depending on modulation scheme and channel bandwidth controlling adaptive selection of user interfaces and their speeds.

Advantages and key features

- 6-23 GHz Frequency band support
- Wide band support from 7-56MHz RF Channel Bandwidths
- Supports QPSK/16QAM/32QAM/64QAM/128QAM/256QAM Modulation schemes
- High Tx Power radio
- Low noise figure, low phase noise and high linearity
- Compact and lightweight design, the smallest IDU in its class
- Very high frequency stability +/- 5 ppm
- Wide operating temperature range for ODU: -40 to +65°C
- Up to 16xE1 or 1xE3, one Gigabit Ethernet and one Fast Ethernet traffic interfaces with true traffic capacity from 5Mbps up to 622Mbps.
- Capacity is dynamically allocated between E1/E3 channels and Ethernet
- Features ATPC and Adaptive Modulation (user defined)
- Built-in Spectrum Analyzer, BER Tester, and Throughput, WAN Utilization charts
- ODU features standard direct 'slip fit' mounting
- Fully supported by Proxim Vision ES Network Management Solution
- Designed to meet FCC, ETSI and CE safety and emission standards
- Supports popular ITU-R standards and frequency recommendations

PRODUCT SERIES	Tsunami® GX800 Product Family
GX800-6U/L	Tsunami GX800, 6U/6LGHz Microwave Link Series
GX800-07	Tsunami GX800, 7GHz Microwave Link Series
GX800-08	Tsunami GX800, 8GHz Microwave Link Series
GX800-10/11	Tsunami GX800, 10/11GHz Microwave Link Series
GX800-13	Tsunami GX800, 13GHz Microwave Link Series
GX800-15	Tsunami GX800, 15GHz Microwave Link Series
GX800-18	Tsunami GX800, 18GHz Microwave Link Series
GX800-23	Tsunami GX800, 23GHz Microwave Link Series
RADIO & TRANSMISSION	
FREQUENCY BANDS	

Frequency Band (GHz)	Frequency Range (GHz)	T/R Spacing (MHz)
6U/L	5.925 - 7.110	160, 170, 252.04, 300, 340, 350
7	7.125 - 7.725	154, 160, 161, 168, 196, 245
8	7.9 - 8.5	119, 126, 208, 266, 311.32
10/11	10.7 - 11.7	350, 490, 500, 530
13	12.75 - 13.25	266
15	14.4 - 15.4	315, 420, 475, 490, 640, 644, 728
18	17.7 - 19.7	1008, 1092.5, 1010, 1560
23	21.2 - 23.6	1008, 1200, 1232
26	24.2 - 26.5	800, 1008

CHANNEL BANDWIDTH	Wideband support. Configurable from 7-56MHz • CEPT/ETSI: 7, 14, 28, 56MHz • ANSI/FCC: 10, 20, 30, 40, 50MHz
MAX TX POWER	27 dBm
TX POWER CONTROL	1 dBm Steps and Supports ATPC
MAX RX SENSITIVITY	-90 dBm
MODULATION	QPSK, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
ERROR CORRECTION	FEC, Predistortion, Equalization, Internal BER
FREQUENCY STABILITY	±5 ppm
EMISSION DESIGNATOR	30M0D1D (ANSI), 28M0D1D (ETSI)
BRIDGING & DATA INTERFACES	
TRAFFIC INTERFACES	Gigabit Ethernet 1000Mbps Base T (RJ45) + One 100Mbps Fast Ethernet HSI Module Interface Options: nxE1, nxT1, nxE3, nxT3
THROUGHPUT CAPACITY	622Mbps
LATENCY	100 µs – 400 µs
VLAN, QOS	IEEE 802.1Q, 802.1p QoS
MANAGEMENT	
CHANNEL	Inband and out-of-band
SNMP	SNMP v1/v2c, Manageable via Proxim Vision ES
TELNET	IP Based via dedicated NMS port
SERIAL	Craft/RS232 Port
HTTP	Web based GUI
USB	2 USB Ports. USB port A can be used for connecting USB flash card for configuration store/restore, firmware upgrade and to download log files from device. USB port B is used for device debug Management by Proxim
Out-of-band interface	10 / 100 Base T Fast Ethernet Port (RJ-45)
PHYSICAL	
DIMENSIONS	IDU : 10.0 x 1.73 x 7.9 in (Std 19" Half rack mount & 1U height) ODU : 10.9 x 9.4 x 3.6 in
WEIGHT	IDU : 2.6 lbs ODU : ≤ 9.5 lbs
POWER	
POWER INPUT	-48 VDC (EN 300 132-2)
MAX POWER CONSUMPTION	60W Max. (IDU + ODU)
ENVIRONMENTAL	
OPERATING TEMPERATURE	IDU: ETS 300 019 Class 3.2 (-5 to +45°C) ODU: ETS 300 019-2-4 Class 4M5 (-45 to +65ºC)
RELATIVE HUMIDITY	up to 95% (non-condensing)
MTBF & Warranty	200,000 hours & 2 year parts and labor
REGULATORY	ETSI/FCC Compliant CE Mark Certification 50 Year Recyclable Compliant ROHS-Compliant

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