



**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: -45 to +55°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

<b>PRODUCT SERIES</b>	<b>Tsunami® GX800 Product Family</b>																													
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																													
<b>RADIO &amp; TRANSMISSION</b>																														
<b>FREQUENCY BANDS</b>	<table border="1"> <thead> <tr> <th>Frequency Band (GHz)</th> <th>Frequency Range (GHz)</th> <th>T/R Spacing (MHz)</th> </tr> </thead> <tbody> <tr> <td>6U/L</td> <td>5.925 - 7.110</td> <td>160, 170, 252.04, 300, 340, 350</td> </tr> <tr> <td>7</td> <td>7.125 - 7.725</td> <td>154, 160, 161, 168, 196, 245</td> </tr> <tr> <td>8</td> <td>7.9 - 8.5</td> <td>119, 126, 208, 266, 311.32</td> </tr> <tr> <td>10/11</td> <td>10.7 - 11.7</td> <td>350, 490, 500, 530</td> </tr> <tr> <td>13</td> <td>12.75 - 13.25</td> <td>266</td> </tr> <tr> <td>15</td> <td>14.4 - 15.4</td> <td>315, 420, 475, 490, 640, 644, 728</td> </tr> <tr> <td>18</td> <td>17.7 - 19.7</td> <td>1008, 1092.5, 1010, 1560</td> </tr> <tr> <td>23</td> <td>21.2 - 23.6</td> <td>1008, 1200, 1232</td> </tr> </tbody> </table>			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
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<b>CHANNEL BANDWIDTH</b>	Wideband support. Configurable from 7-56MHz • CEPT/ETSI: 7, 14, 28, 56MHz • ANSI/FCC: 10, 20, 30, 40, 50MHz																													
<b>MAX TX POWER</b>	27 dBm																													
<b>TX POWER CONTROL</b>	1 dBm Steps and Supports ATPC																													
<b>MAX RX SENSITIVITY</b>	-90 dBm																													
<b>MODULATION</b>	QPSK, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM																													
<b>ERROR CORRECTION</b>	FEC, Predistortion, Equalization, Internal BER																													
<b>FREQUENCY STABILITY</b>	±5 ppm																													
<b>EMISSION DESIGNATOR</b>	30MOD1D (ANSI), 28MOD1D (ETSI)																													
<b>BRIDGING &amp; DATA INTERFACES</b>																														
<b>TRAFFIC INTERFACES</b>	Gigabit Ethernet 1000Mbps Base T (RJ45) + One 100Mbps Fast Ethernet HSI Module Interface Options: nxE1, nxT1, nxE3, nxT3																													
<b>THROUGHPUT CAPACITY</b>	622Mbps																													
<b>LATENCY</b>	100 µs – 400 µs																													
<b>VLAN, QOS</b>	IEEE 802.1Q, 802.1p QoS																													
<b>MANAGEMENT</b>																														
<b>CHANNEL</b>	Inband and out-of-band																													
<b>SNMP</b>	SNMP v1/v2c, Manageable via Proxim Vision ES																													
<b>TELNET</b>	IP Based via dedicated NMS port																													
<b>SERIAL</b>	Craft/RS232 Port																													
<b>HTTP</b>	Web based GUI																													
<b>USB</b>	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																													
<b>Out-of-band interface</b>	10 / 100 Base T Fast Ethernet Port (RJ-45)																													
<b>PHYSICAL</b>																														
<b>DIMENSIONS</b>	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																													
<b>WEIGHT</b>	IDU : 2.6 lbs ODU : ≤ 9.5 lbs																													
<b>POWER</b>																														
<b>POWER INPUT</b>	-48 VDC (EN 300 132-2)																													
<b>MAX POWER CONSUMPTION</b>	60W Max. (IDU + ODU)																													
<b>ENVIRONMENTAL</b>																														
<b>OPERATING TEMPERATURE</b>	IDU: ETS 300 019 Class 3.2 (-5 to +45°C) ODU: ETS 300 019-2-4 Class 4M5 (-45 to +55°C)																													
<b>RELATIVE HUMIDITY</b>	up to 95% (non-condensing)																													
<b>MTBF &amp; Warranty</b>	200,000 hours & 2 year parts and labor																													
<b>REGULATORY</b>	ETSI/FCC Compliant CE Mark Certification 50 Year Recyclable Compliant ROHS-Compliant																													