

Ultra high performance backhaul delivering up to 1.8 Gbps

Tsunami® GX-824, is a very high throughput, extremely reliable and cost-effective, all outdoor unlicensed point-to-point (PtP) microwave solution operating in the 24 GHz band. With its capacity up to 900 Mbps full duplex (1.8 Gbps aggregate), hitless ACM and modulation schemes up to 1024QAM, Tsunami® GX-824 brings new dimension to microwave links market and can be used as adequate alternative to 60 and 80 GHz millimeter wave links.

Features

- 24 GHz Unlicensed Frequency bands
- 3.5 to 112 MHz channels
- Transmission capacity up to 900 Mbps [660 Mbps in the USA and Canada due to regulatory constraints]; 1.8 Gbps for 2+0 configuration [1.32 Gbps for the USA and Canada]
- Two Gigabit Ethernet + one SM/MM fiber interfaces
- Jumbo packets up to 10,240 Bytes
- Modulation type QPSK to 1024 QAM
- Hitless adaptive coding & modulation
- Forward error correction (FEC)
- Automatic TX power control (ATPC)
- All-Outdoor design with 1, 2, 3 or 4 foot antennas (30, 60, 90 or 120 cm)
- Full overvoltage protection of ODU unit

Applications

- Local / Metropolitan / Wide area networks
- IPTV distribution
- Multimedia applications
- Last miles

Management

- Proprietary GX-824 Manager
- Software configurable
- Independent diagnostic channel
- SNMP protocol
- WEB interface
- Command line interface
- System configuration 1+0, 1+1 or 2+0

Ethernet

- QoS support (VLAN p-bit / DSCP / port priority)
- Full support of VLAN and QinQ (802.1Q,802.1ad)
- Two independent Ethernet lines through radio link
- Ethernet port shutdown when the radio link is bad

Surge Protected PoE Injector - GX-824-POEINJ

- Full overvoltage protection
- DIN rail or rack mount compatible
- Compact 1U rack unit for 3 injectors
- GX-824-POEINJ surge protected PoE injector and GX-824-PSU-ACDC 48 VDC power supply are not included in with link (to be ordered separately)



About Proxim Wireless

Proxim Wireless is a pioneer and global leader in advanced Wi-Fi, point to point, and point to multipoint outdoor wireless systems that deliver high performance and high availability communications.

With over 30 years of wireless experience, Proxim is recognized for its unparalleled reliability, superior performance and drive for innovation.

Specifications

| PRODUCT MODELS | | PART NUMBERS | | | | | | |
|----------------------|---|----------------|--------------|---------------|---------------|---------------|---------------|----------------|
| GX-824-SM-LNK-A30 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + SM Fiber, 1 ft – 30 cm antenna | 952-00315 | | | | | | |
| GX-824-MM-LNK-A30 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + MM Fiber, 1 ft – 30 cm antenna | 952-00316 | | | | | | |
| GX-824-SM-LNK-A60 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + SM Fiber, 2 ft – 60 cm antenna | 952-00317 | | | | | | |
| GX-824-MM-LNK-A60 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + MM Fiber, 2 ft – 60 cm antenna | 952-00318 | | | | | | |
| GX-824-SM-LNK-A90 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + SM Fiber, 3 ft – 90 cm antenna | 952-00319 | | | | | | |
| GX-824-MM-LNK-A90 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + MM Fiber, 3 ft – 90 cm antenna | 952-00320 | | | | | | |
| GX-824-SM-LNK-A120 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + SM Fiber, 4 ft – 120 cm antenna | 952-00321 | | | | | | |
| GX-824-MM-LNK-A120 | Tsunami GX-824 Link, 920 Mbps FD, Gigabit Eth + MM Fiber, 4 ft – 120 cm antenna | 952-00322 | | | | | | |
| INTERFACES | | | | | | | | |
| ETHERNET | Two Gigabit Ethernet 1000Base-T (RJ45) Auto MDIX ports with 10k jumbo frame support One Optic Fiber 1000Base-SX / 1000Base-LX / 1000Base-BX port | | | | | | | |
| MANAGEMENT | Diagnostic channel with Ethernet / RS-232 interface Antenna alignment voltage (BNC) | | | | | | | |
| ANTENNA (ODU) | Integrated with the ODU | | | | | | | |
| RADIO & TX SPECS | | | | | | | | |
| MODULATION | QPSK, 8PSK, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 1024QAM with Hitless adaptive coding & modulation (ACM) | | | | | | | |
| FREQUENCY BANDS | Frequency Range 24.000 to 24.250GHz [24.050 to 24.250 in the USA and Canada] | | | | | | | |
| CHANNEL BANDWIDTH | Wideband support. Configurable from 3.5 to 112 MHz [3.5 to 80 MHz for the USA and Canada] | | | | | | | |
| TX POWER | From -27 to +5 dBm | | | | | | | |
| TX POWER CONTROL | Automatic Transmit Power Control (ATPC) | | | | | | | |
| | Channel Size (MHz) | 3.5 MHz | 7 MHz | 14 MHz | 28 MHz | 56 MHz | 80 MHz | 112 MHz |
| RX SENSITIVITY | QPSK | -94 | -91 | -88 | -85 | -83 | -81 | -79 |
| | 8PSK | -91 | -88 | -85 | -81 | -79 | -77 | -75 |
| | 16QAM | -88 | -85 | -82 | -78 | -76 | -75 | -73 |
| | 32QAM | -84 | -82 | -79 | -75 | -73 | -71 | -69 |
| | 64QAM | -81 | -79 | -76 | -72 | -70 | -68 | -66 |
| | 128QAM | -78 | -76 | -73 | -69 | -67 | -65 | -63 |
| | 256QAM | -75 | -73 | -70 | -66 | -64 | -62 | -60 |
| | 1024QAM | -68 | -65 | -63 | -60 | -57 | -54 | -52 |
| ERROR CORRECTION | Reed-Solomon FEC and Convolutional Interleaver | | | | | | | |
| FREQUENCY STABILITY | < 10 ppm | | | | | | | |
| ANTENNAS OPTION | | | | | | | | |
| | 1 foot – 30 centimeters, 35.5 dBi 2 foot – 60 centimeters, 41 dBi 3 foot – 90 centimeters, 44 dBi 4 foot – 120 centimeters, 46 dBi | | | | | | | |
| MANAGEMENT | | | | | | | | |
| LOCAL | RS-232 interface | | | | | | | |
| REMOTE | Proprietary GX-824 Manager, telnet (CLI) | | | | | | | |
| SNMP | SNMP v1, Enterprise MIB | | | | | | | |
| OTHER | Spectrum analyzer | | | | | | | |
| SECURITY | | | | | | | | |
| ENCRYPTION | AES 256 bits | | | | | | | |
| QoS | | | | | | | | |
| | 4 queues based on physical port, 802.1p tag or IP DiffServ | | | | | | | |
| NETWORK | | | | | | | | |
| MODES | 1+0, 1+1 SD/FD (protected) or 2+0 (true aggregate) | | | | | | | |
| CONFIGURATION SCHEME | 900 Mbps full duplex (1800 Mbps true aggregate) [660 Mbps full duplex (1320 Mbps true aggregate) in the USA and Canada] | | | | | | | |
| THROUGHPUT CAPACITY | < 90 μs @ 900 Mbps | | | | | | | |
| LATENCY | 802.1Q (4096 VLAN IDs) and QinQ | | | | | | | |
| VLAN | | | | | | | | |

| POWER | | | | |
|--------------------------------------|--|-------------------|-----------|---|
| POWER INPUT MAX POWER CONSUMPTION | 48 VDC (support from 36 to 72 VDC) Up to 27 W | | | |
| ENVIRONMENTAL SPECS | OPERATING TEMPERATURE | RELATIVE HUMIDITY | IP RATING | WIND LOADING |
| | -31 to +131 °F (-35 to +55°C) | 100% | IP65 | 70 Mph (112 km/h) Operational, 125 Mph (200 km/h) Survival |
| PHYSICAL SPECS | | | | |
| DIMENSIONS WEIGHT | 5.2 x 10 x 11.8 in. (133 x 255 x 301 mm) 11.2 lbs (5.1 kg) without antenna | | | |
| PACKAGE CONTENTS | | | | |
| | <ul style="list-style-type: none"> • Two Tsunami® GX-824 ODU • Two antennas • Two Mounting Kits • One Quick Installation Guide | | | |
| OPTIONS | | | | PART NUMBER |
| GX-824-PSU-ACDC | 110 – 220 VAC to -48 VDC Power Supply Unit for GX-824 | | | 949-00130 |
| GX-824-POEINJ | Surge Protected PoE injector (-48 VDC input) for GX-824 | | | 949-00131 |
| GX-824-CAP-SM | SM Fiber weatherproofing cap for GX-824 | | | 949-00136 |
| GX-824-CAP-MM | MM Fiber weatherproofing cap for GX-824 | | | 949-00137 |
| MTBF & WARRANTY | | | | |
| | 2 year parts and labor. ServPak Extended Support available | | | |