

Tsunami.GX 90 Wireless Point-to-Point Ethernet Bridges

Fast, Cost-Effective Extension of IP Networks

Proxim's Tsunami[™].GX is a full-duplex point-to-point wireless Ethernet bridge with an innovative split-box design. This latest generation of high-capacity wireless bridges is designed to reduce the expense of extending IP networks and to simplify installation. Secure wireless technology significantly reduces total cost of ownership and speeds deployment, while a split-box design adds installation flexibility. The Tsunami.GX also provides best-in-class system performance with native IP interfaces by eliminating the overhead associated with DS3-to-Ethernet connections.

- Perfect for data and data/voice network backhaul applications and for replacing, extending or backing up leased lines
- Indoor-only installation facilitates quick maintenance and easier upgrades
- Indoor/outdoor installation improves system gain and reduces total cost of ownership

Easily Manage and Troubleshoot Your Wireless Network

Tsunami.GX bridges offer sophisticated, preventative management tools to simplify network maintenance and eliminate downtime. Advanced diagnostic tools identify and isolate potential issues before they impact the network.

- Standards-based SNMP management and webbased GUI simplifies remote management and integrates easily into existing software platforms
- Built-in spectrum analyzer and an alarm log facilitate RF planning and post-deployment tuning

The Cost of Ethernet at the Speed of DS-3

Backed by more than 20 years of wireless design innovation, Proxim's Tsunami wireless bridge family

easily and affordably enables network extension, redundancy and backhaul. Tsunami wireless bridges eliminate fiber installation costs and leased line fees to bring you the capacity of DS-3 with the TCO of Ethernet.

- High capacity for bandwidth-intensive applications such as PBX extension, data backhaul and critical link redundancy
- No expensive recurring leased line costs
- Superior system gain ensures consistent, high quality network operation

Deploy in Days

Because Tsunami bridges operate in license-exempt ISM frequency bands, they can be deployed quickly – eliminating the long lead times associated with leasing lines or trenching new fiber optic cable. This is especially useful in network redundancy and contingency planning.

- Rapid device deployment and flexible re-deployment
- ISPs maintain business continuity, even in severe conditions
- Enterprises minimize costly business application downtime

Reliable and Secure

A wireless alternative to a wired network yields quality as well as flexibility. Proxim's Tsunami bridges offer the highest security and reliability available in networking today.

- Over 99.999% reliable RF transmission
- Meets or exceeds wired network security
- Proprietary encryption methods ensure secure data transmission





APPLICATIONS

- Enterprise LAN and PBX extension
- WAN connection redundancy
- ISP remote POP
- ISP direct customer connections using pointto-point
- Multipoint backhaul at DS-3 performance
- Extension of an existing fiber network

Tsunami.GX 90 Specifications

FREQUENCY	DIGITAL CAPACITY	CHANNEL PAIRS	FCC EMISSION DESIGNATOR	THRESHOLD (BER=1X10 ⁻⁶)	OUTPUT POWER	System gain		DISTANCE (MILES/KM)	
5725-5850 MHz	98 Mbps ⁴	1	28M1G7D	≤-79 dBm	≥+23 dBm¹	≥102 dB, 10 6 d	dB typ.	0 to >32/51 ³	
SYSTEM				POWER/ENVIR	ONMENT				
Configuration		Split-box: IDU, RF Unit		Input Voltage Range		-20 to	-20 to -60 Vdc or +20 to +60 Vdc		
Modulation		DSSS; QPSK				+20 to			
Frequency Stability		±10 ppm		Power Consumption		<70 W	<70 Watts		
RF Attenuation Range ¹		≥20 dB		Power Connector		3-pin t	3-pin terminal block		
Maximum Receive Signal		-20 dBm error free; 0 dBm no damage		Operating Temperature					
				IDU	0°C to	0°C to +50°C			
Error Floor		<10-11		RF Unit	-30°C	to +55°	Ċ		
Latency (T1) ² , one-way		325 µsec ±10%		Humidity		050/			
Error Correction		Reed-Solomon		IDU RF Unit		95%, 100%	95%, non-condensing		
Security		12 character Link ID (48 bits)		Altitude	100 /0,	up to 15 000 ft/5000 m			
Regulatory Compliance		FCC Part 15.247; IC RS210		Wind Loading (RE upit)			up to 110 mph/96 kts		
FCC ID		HZB-US5358-GX1			> 100 C				
Industry Canada ID		1856A-U5358GX1		MTBF RF Unit		>100,0	>100,000 Hours		
DIGITAL LINE INT	ERFACES			PHYSICAL DIM	1ENSIONS				
Main Data Channel ⁴		96 Mbps aggregate			IDU	RF Unit	i		
10/100 Base T		48 Mbps full duplex RJ-45 modular jack		Size (in/cm) 17.2 X 10.9 X 1 43.6 X 27.6 X 4		X 1.72/ 14.1 X X 4 4 35 8 X	1.72/ 14.1 X 10.9 X 1.72/		
		Auto-sense MDI/MDI-X		Weight (lbs/kg)	12 0/5	12 0/5 4			
10/100 Base FX		SC-Type, multi-n Fiber	node	MECHANICAL	0.5/2.5	12.0/3			
Compliance		IEEE 802.3		RF Unit					
Wayside Data Chan	nels			Antenna Por	t	Type-N	female	£	
		DSX-1 (2 each) RJ-48C modular jack		(outdoor RF cable not provided) IDU Port Cable to IDU		ded) TNC fe LMR-24	TNC female LMR-240 or equiv. <100m;		
AUXILIARY INTER	RFACES					LMR-4	00 or e	quiv. <300m	
Orderwire (DTMF)		RJ-11, 100 addr	esses	Mounting					
VF		8 pin modular jack, 4-wire 0dBm @ 600 ohm, balanced		IDU RF Unit		EIA rac 1RU	EIA rackmount, 19" or 23", 1RU EIA rackmount, 19" or 23", 1RU, or outdoor pole mount bracket (optional)		
Aux Data (serial)		8 pin modular jack, EIA-561 ≤19.2kbps, selectable, DCE				EIA rac 1RU, o bracka			
FAULT AND CON	FIGURATION MAI	NAGEMENT		SELECTARLE E			ι (οριιοί	lidi)	
Network Management		SNMP v2c (MIB II, Proxim enterprise MIBs), embedded							
							5745/5850 10112		
		terminal			ORMATION	Low B	and Torr	minal	
Far End Managemer	nt	Via NMS (embedded route		07254		301-57	710-61	ninai, I HO	
		gateway address, subnet mask), front panel display		67255	High B 301-57	High Band Terminal, 301-57710-6110			
Interfaces		· ·		ACC-GX-RF-2		Ontion	al RF L I	nit Outdoor	
NMS 1 NMS 2 Configuration (serial)		10/100BaseT, RJ-45, auto-sense 10/100BaseT, RJ-45, auto-sense EIA-574, 9600bps, 9-pin Sub-D, DTE				Mount	Mounting Kit		
				201-31075-1	Option 110/22 and co	Optional AC Adapter 110/220 VAC with cable and connector			
				Call for details	ServPal	ServPak 24x7 Enhanced			
External Alarm Inter	face					contrac	ts (1yr-	3yr)	
Connector Outputs		9-pin Sub-D female 2 Form C Relays (Major, Minor)		SHIPPING CON	IFIGURATI <u>ON</u>				
				Tsunami.GX 90 IE	DU (Indoor Unit)			
inputs 2 TTL with internal pull-up			iai puli-ups	ICM Law Dand ar	Lligh Dand DE	1 1 Se			
			1	ISIVI LOW BAILO OF	HIGH BANG KE	Unit			

³ RF Unit installed outdoors with 6ft. parabolic antenna, 99.995% one-way availability, average climate/terrain, no multipath reflection. Assumes FCC regulations for EIRP

⁴ No Waysides enabled



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About Proxim

Proxim Corporation is a global leader in wireless networking equipment for Wi-Fi and broadband wireless networks. The company provides its enterprise and service provider customers with wireless solutions for the mobile enterprise, public hot spots, security and surveillance, last mile access, metropolitan area networks and voice and data backhaul.

ACC-GX-RF-1 RF Unit Indoor Mounting Kit

(includes 12" IDU to RFU TNC-to-TNC cable)

Quick Install Guide

CD-User Documentation