



Tsunami Multipoint Wireless Point-to-Multipoint System



APPLICATIONS

- Last mile access
- Extending VoIP service to remote sites
- Leased line replacement
- Fast service deployment into multi-tenant, rural areas
- Campus networking

Cutting-Edge Technology Delivers Carrier-Class Performance

The Tsunami Multipoint wireless Ethernet system delivers cutting-edge technology built on over twenty years of wireless innovation at Proxim. Advanced features deliver reliable, cost-effective alternatives to legacy leased lines, while delivering superlative network performance. The combined throughput and reliability make the Tsunami Multipoint systems perfect for high-performance campus networks, and densely populated last mile Internet access. Proxim point-to-multipoint innovation includes:

- Patented Active Interference Rejection (AIR) technology, which uses a pre-processing filter to nullify interference in the 5.8 GHz band
- Proxim's finely honed wireless transmission protocol, which delivers 200% better throughput than competitors, achieved through protocol efficiency gains
- Specialized traffic prioritization algorithms and VLAN functionality, enabling latency-sensitive application performance
- Unique Ethernet plus power technology, combining power and network connections into a single Cat5 link
- Connections engineered with true carrier-class 99.995% reliability

Simplify Operations and Cost-structure

Tsunami Multipoint dramatically simplifies the installation and maintenance of high-performance network links. These results translate into a quick payback period relative to leased lines, and have many direct cost-saving benefits.

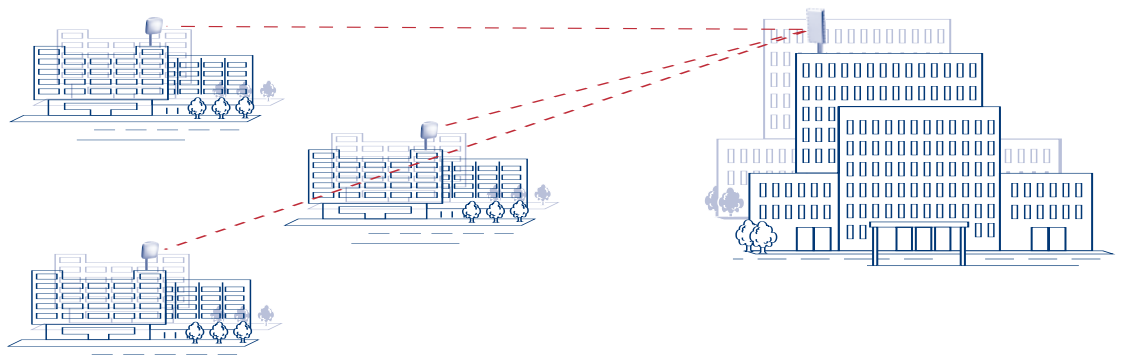
- Private infrastructure eliminates recurring monthly leases and bypasses telephone tolls

- Outdoor weatherized Subscriber Unit allows system maintenance without entering the subscriber's building
- Single cable design eliminates installation labor and expense
- Antenna connectors facilitate coverage area "shaping" and reduce initial infrastructure costs
- Audible tones guide directional positioning, allowing one-person installation
- Remote SNMP management proactively detects issues
- Unlicensed band operation eliminates regulatory delays and fees/costs

Unrivaled Performance Trounces Competition

Performance, capacity and scalability are critical concerns in designing business networks. Whether it's expanding service footprint or connecting buildings on a new campus, system performance dictates the success of critical applications. Tsunami Multipoint offers:

- Industry-leading 60 Mbps and 20 Mbps over-the-air transmission rates
- Unrivaled 54 Mbps and 18 Mbps throughput rates – 200% higher than closest competitor
- 99.99%+ effective interference prevention, yielding superior performance in high-density areas
- Base Station Unit support for 1000+ Subscribers Units, scaling to network and subscriber demand
- 6 miles/10km range, easily linking sites and extending VoIP functionality



Tsunami Multipoint Specifications

	MODEL	MODEL NUMBER	AGGREGATE THROUGHPUT	THRESHOLD (BER=1X10 ⁻⁶)	OUTPUT EIRP	ACTIVE INTERFERENCE REJECTION (A.I.R)
Base Station Unit (BSU)	60 Mbps	301-40400-65	17, 25.5, 34, 51 Mbps	-77 dBm	36 dBm	
	20 Mbps	301-40400-25	17 Mbps	-89 dBm	36 dBm	
	60 Mbps	301-40400-65R	17, 25.5, 34, 51 Mbps	-77 dBm	36 dBm	✓
	20 Mbps	301-40400-25R	17 Mbps	-89 dBm	36 dBm	✓
Subscriber Unit (SU)	60 Mbps	301-40100-652	17, 25.5, 34, 51 Mbps	-89, -85, -81, -77 dBm	35 dBm	
	20 Mbps	301-40100-252	17 Mbps	-89 dBm	35 dBm	
SYSTEM						
Operating Frequency Range		5725-5825 MHz				
Radio Access Method		TDMA				
Duplexing		Time Division Duplex (TDD)				
Integrated Antenna: BSU/SU		18 dBi (60° x 6°)/20 dBi (10° x 10°)				
Max Subscriber Units /BSU		1,023				
Distance/Capacity Limits (clear line of site/over the air)		60 Mbps at 3 miles/5 kilometers; 20 Mbps at 6 miles/10 kilometers				
Frequency Channels		4 non-overlapping, 6 available				
Regulatory Compliance		FCC Part 15.400 (U-NII); FCC Part 15.247 (ISM) 20 Mbps only; Industry Canada RSS210; Model 40100-25/40100-65 (SU); Model 40400-25/40400-65 (BSU)				
STANDARDS COMPLIANCE AND INTERFACES						
Ethernet Interface		10/100BaseT				
Ethernet Connector		RJ45 female				
SU indoor-outdoor cable		RJ45 (outdoor) & DIN (indoor) over Category-5 cable				
BSU indoor-outdoor cable		Weatherproof RJ45 connectors over Category-5 cable				
Standards Compliance		IEEE 802.1d Bridging Mode; IEEE 802.1q transparent VLAN tagging				
CONFIGURATION AND MANAGEMENT						
Base Station Unit Configuration		Via Ethernet				
Subscriber Unit Configuration		Automatic				
Management		Via optional SNMP Toolkit (p/n 501-40400-ST)				
Security		Authentication, IP/MAC Filtering				
Software Upgrades		Over-the-air Subscriber Unit reprogramming; Downloadable Base Station Unit reprogramming				
POWER/ENVIRONMENT						
Electrical:						
Base Station Unit		+48 Volts DC, 1 Amp				
Subscriber Unit		+28 Volts DC, 0.6 Amps				
Base Station Unit Power Brick		100–240 Volts AC, 50/60 Hz				
Subscriber Unit Power Brick		110 or 220 Volts AC				
Operational Temperature		-25°–55° C (BSU and SU only)				
Humidity		5%–100%, condensing				
MTBF		Base Station Unit: 75,000 hours; Subscriber Unit: 100,000 hours				
FCC		Part 15/Class B				
PHYSICAL DIMENSIONS						
SU (Outdoor Unit)		SIZE (W x H x D)			WEIGHT	
SU Power Brick (Indoor Unit)		10.5 x 10.5 x 6.8 in/26.5 x 26.5 x 17.4 cm			10 lbs/4.5 kg	
SU Power Brick (Indoor Unit)		3.6 x 5.1 x 2.6 in/9.2 x 13 x 6.7 cm			2.7 lbs/1.2 kg	
BSU (Outdoor Unit)		10.2 x 24 x 6.6 in/25.9 x 61 x 16.8 cm			20 lbs/9 kg	
BSU Power Brick (Indoor Unit)		3.7 x 7.1 x 2.5 in/9.5 x 18 x 6.3 cm			1.5 lbs/0.7 kg	
MOUNTING (INSTALLATION)						
Base Station Unit		Pole Mount, 1.75–2.75 in dia.				
Subscriber Unit		Pole Mount, 1.25–1.75 in dia.				
WIND LOADING						
Maximum operational wind speed		50m/s (112mph)				
Maximum survivable wind speed		90m/s (200mph)				
WARRANTY						
1-year limited parts and labor						
Service Packs available for priority technical assistance						

About Proxim Wireless

Proxim Wireless is a global leader in networking equipment for Wi-Fi and broadband wireless networks. Proxim provides solutions for enterprise applications, last mile access, municipal broadband networks, and cellular backhaul. Product families include ORINOCO and TeraStar Wi-Fi products; Tsunami, TeraBridge, Gigalink, and TeraOptic Ethernet bridges, and Lynx point-to-point digital radios.

Tsunami Multipoint with External Antenna Connector

	MODEL	MODEL NUMBER	AGGREGATE THROUGHPUT	THRESHOLD (BER=1X10 ⁻⁶)	OUTPUT POWER
Base Station Unit (BSU)	60 Mbps	301-40400-65C	17, 25.5, 34, 51 Mbps	-77 dBm	17 dBm
Subscriber Unit (SU)	60 Mbps	301-40100-652C	17, 25.5, 34, 51 Mbps	-87, -83, -79, -75 dBm	17 dBm
SYSTEM					
Operating Frequency Range	5725-5825 MHz				
Radio Access Method	TDMA				
Duplexing	Time Division Duplex (TDD)				
Max Subscriber Units/BSU	1,023				
Distance/Capacity Limits (clear line of site/over the air)	60 Mbps at 4 miles/6.9 kilometers; 20 Mbps at 6 miles/10 kilometers				
Frequency Channels	4 non-overlapping, 6 available				
Regulatory Compliance	FCC Part 15.400 (U-NII); Industry Canada RSS210; Model 40100-652C (SU)/40400-65C (BSU)				
STANDARDS COMPLIANCE AND INTERFACES					
Ethernet Interface	10/100BaseT				
Ethernet Connector	RJ45 female				
SU indoor-outdoor cable	RJ45 (outdoor) & DIN (indoor) over Category-5 cable				
BSU indoor-outdoor cable	Weatherproof RJ45 connectors over Category-5 cable				
External Antenna Connector	Standard -N Female				
Standards Compliance	IEEE 802.1d Bridging Mode; IEEE 802.1q transparent VLAN tagging				
CONFIGURATION AND MANAGEMENT					
Base Station Unit Configuration	Via Ethernet				
Subscriber Unit Configuration	Automatic				
Management	Via optional SNMP Toolkit (p/n 501-40400-ST)				
Security	Authentication, IP/MAC Filtering				
Software Upgrades	Over-the-air Subscriber Unit reprogramming; Downloadable Base Station Unit reprogramming				
POWER/ENVIRONMENT					
Electrical:					
Base Station Unit	+48 Volts DC, 1 Amp				
Subscriber Unit	+28 Volts DC, 0.6 Amps				
Base Station Unit Power Brick	100-240 Volts AC, 50/60 Hz				
Subscriber Unit Power Brick	110 or 220 Volts AC				
Operational Temperature	-25°-55° C (BSU and SU only)				
Humidity	5%-100%, condensing				
MTBF	Base Station Unit: 75,000 hours; Subscriber Unit: 100,000 hours				
FCC	Part 15/Class B				
PHYSICAL DIMENSIONS		SIZE (W x H x D)	WEIGHT		
SU (Outdoor Unit)	10.5 x 10.5 x 6.8 in/26.5 x 26.5 x 17.4 cm		10 lbs/4.5 kg		
SU Power Brick (Indoor Unit)	3.6 x 5.1 x 2.6 in/9.2 x 13 x 6.7 cm		2.7 lbs/1.2 kg		
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Base Station Unit	Pole Mount, 1.75-2.75 in dia.				
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WIND LOADING					
Maximum operational wind speed	50m/s (112mph)				
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WARRANTY					
1-year limited parts and labor					
Service Packs available for priority technical assistance					

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