



QuickBridge.11 (2454-R, 5054-R & 5054-R-LR)

High-Capacity Wireless Backhaul

Proxim Wireless offers extremely reliable, secure and easily-deployed solutions for interconnecting corporate and telecommunications networks. This portfolio includes:

- **Gigalink®** – Alternative to fiber, up to a Gigabit speed
- **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
- **TeraBridge™** – Ethernet backhaul or traditional telecommunications converged voice and data networks
- **QuickBridge®** – Complete “hop-in-a-box” Ethernet bridge for campus and small business networks

Proxim Wireless is a global provider in scalable broadband wireless networking. From Wi-Fi to wireless Gigabit Ethernet – our WLAN, mesh, point-to-multipoint and point-to-point products are available through our extensive global channel network.

Cost Effective Solution for Quick Return on Investment

The Tsunami QuickBridge.11 family operates in the unlicensed frequency spectrums of 2.4 GHz and 5 GHz (5.15, 5.25, 5.47, and 5.725) and comes complete with a set of accessories to ease outdoor installations. As the most cost-effective point-to-point solution from Proxim, any deployment will enjoy a quick return on investment.

- Suitable for the service provider, municipal and education markets
- Certified for deployments in the Americas, Europe, Asia, and Australia
- Designed with the same high quality and reliability that are synonymous with all Proxim Tsunami wireless bridges
- High Power version for extended range (5054-R-LR-US, FCC only)

Complete "Hop-In-A-Box" Allows Unprecedented Ease of Installation

Tsunami QuickBridge.11 bundles are the easiest-to-install family of broadband wireless bridges on the market. Requiring no training or wireless experience, they can be installed within hours. Each solution includes everything needed to set up a link right out of the box.

- Hop-in-a-box solution includes two radios with integrated antennas, outdoor-rated Ethernet cables, mounting hardware, power injectors and documentation
- Pre-configured software defaults and easy to use graphical user interface eliminate guess work during installation
- Audible tones ensure antennas are properly aligned

Industry Leading Co-Location Capability

Expand your own service coverage area or co-locate a service within another service provider's existing area – it's never been easier. All Tsunami QuickBridge.11 models support 5/ 10/ 20 MHz channels designed to mitigate radio interference in unlicensed frequency spectrums.

- 5 MHz channel increases the number of non-overlapping channels from 20 to 80+ in the 5 GHz and from 3 to 13 in the 2.4 GHz spectrums
- With the high number of non-overlapping channels, products can be used as high-bandwidth CPE (customer premise equipment) within a limited coverage area
- Less likely to offend neighboring wireless systems

Synergy with Tsunami MP.11 Point-to-Multipoint Systems

Maximum synergy is realized when deployed in conjunction with Tsunami MP.11 point-to-multipoint wireless systems. With the same proven platforms, both products are designed to deliver an equal experience.

- Using the integrated antennas also used in the MP.11, the QuickBridge.11 produces the same radio characteristics
- Same ruggedized enclosures allow the use of common accessories, resulting in reduced inventory and preservation of investments
- Identical CLI and graphical software interfaces reduce training costs, and accelerate installation and troubleshooting

Advanced Security Protects Privacy

QuickBridge.11 implements tiered security layers for the most secure outdoor communication in the unlicensed frequency spectrum.

- Proxim's Wireless Outdoor Routing Protocol (WORP) prevents snooping common to Wi-Fi systems
- Advanced encryption protects over-the-air transmission via AES
- Radio mutual authentication eliminates unauthorized use of the system by rogue Subscriber Units and man-in-the middle attacks
- Password protection of all remote management methods

Tsunami QuickBridge.11 Series

Technical Specifications

PRODUCT MODELS	
2454-QB-XX	Tsunami QuickBridge.11 Model 2454-R Bundle
5054-QB-XX	Tsunami QuickBridge.11 Model 5054-R Bundle
5054-QB-LR-US	Tsunami QuickBridge.11 Model 5054-R-LR Bundle
PERFORMANCE & SCALABILITY	
INTEGRATED ANTENNA	Model 5054-R-(LR) includes an integrated 23-dBi antenna; Model 2454-R includes an 18-dBi antenna
EXTREME OPERATING TEMPERATURE	Rated for -33° to 60° Celsius or -27.5° to 140° Fahrenheit, the system can be deployed outdoors in hot or cold climates
MOST FLEXIBLE FREQUENCY & CO-LOCATIONS SUPPORT	
MOST FLEXIBLE SPECTRUM SELECTION	2.4 – 2.497 GHz; 5.15, 5.25 – 5.35 GHz; 5.47 – 5.725 GHz; 5.725 – 5.85 GHz (including 5.8 GHz for UK licensed spectrum)
TRI-BAND 5 GHZ SUPPORT (5.25/5.47/5.725)	With software selectable frequencies, Model 5054-R can be deployed globally. Operators using 5.25 and 5.725 GHz frequency can reduce spare inventories
5 MHZ CHANNEL SUPPORT	Increase the number of non-overlapping frequency plans to 80+ in 5 GHz and 13 in 2.4 GHz
10 MHZ CHANNEL	Increase the number of frequency plans to 40+ non-overlapping in 5 GHz and 13 overlapping in 2.4 GHz
SECURE & EASY TO MANAGE	
HIGHLY SECURE COMMUNICATION	Unlike the 802.11a/b/g standards, as a proprietary protocol, WOPR eliminates the possibilities of unauthorized snooping
INTER-RADIO AUTH	Mutual authentication embedded in WOPR protocol mitigates man-in-the-middle attacks
STRONGEST ENCRYPTION	Over the air transmission is encrypted using 128-bit AES
FLEXIBLE BANDWIDTH	Bi-directional bandwidth rate limiting allows service providers to offer tiered services; service can be provisioned instantly from the central office, without costly truck rolls
REMOTE MANAGEMENT	Supports flexible and secure remote management via Telnet, SNMP and web interfaces, with password protections
ANTENNA ALIGNMENT TOOL	Audible tone, visual aids via LEDs, and CLI with running statistics displaying real-time signal strength ease antenna installation
COMPREHENSIVE STATION STATISTICS	Unit and group statistics are available for monitoring, planning and management of a wireless network

APPLICATIONS

- Backhaul to a Central POP**
 Avoid expensive installation and recurring charge of a second wireline backhaul to a remote virtual POP
- Leased Line Redundancy**
 Eliminate recurring DS-3 leased line charges with one time installation charge of a QuickBridge.11 link
- Repeater**
 Extend distance or overcome path blockage by adding point to point hops
- High-bandwidth Last Mile Access**
 Use QuickBridge.11 to deliver TLS (Transparent LAN Services) to corporate parks
- Inter-POP Redundancy**
 Avoid downtimes caused by a wireline backhaul failure by adding a QuickBridge.11 link as inter-POP redundancy

INTERFACES		HUMIDITY	
WIRED ETHERNET	10/100Base-TX Ethernet (RJ-45)	OPERATING STORAGE	Max 100% relative humidity (non-condensing) Max 100% relative humidity (non-condensing)
WIRELESS PROTOCOL	WOPR	WATER AND DUST PROOF	IP65
RADIO & TRANSMISSION SPECS		ELECTRICAL (POWER INJECTOR)	
MODULATION METHOD	OFDM	INPUT	Voltage 110 to 250 VAC
FREQUENCY BANDS		OUTPUT	Current 420mA at 48V
MODEL 5054-R	Americas (FCC): 5.25-5.35 GHz (15 channels) Americas (FCC): 5.725-5.850 GHz (21 channels) Europe (ETSI): 5.47-5.725 GHz (46 channels) Europe (Russia): 5.15-5.850 GHz (82 channels) Europe (Licensed in the UK): 5.725-5.850 GHz (21 channels)	POWER CONSUMPTION	Maximum 20 Watt
MODEL 2454-R	Americas (FCC): 2.4-2.4835 GHz (13 channels) Europe (ETSI): 2.4-2.4835 GHz (13 channels) Japan (MCK): 2.4-2.497 GHz (14 channels)	POWER OVER ETHERNET	Via RJ-45 Ethernet interface port
MODEL 5054-R-LR	Americas (FCC): 5.25-5.35 GHz (15 channels) Americas (FCC): 5.725-5.850 GHz (21 channels)	MANAGEMENT	
DATA RATE	54, 48, 36, 24, 18, 12, 9, 6, 4.5, 3, 2.25, 1.5 Mbps	LOCAL	RS-232 serial (RJ11 and DB-9)
PHYSICAL SPECS		REMOTE	Telnet, Web GUI, TFTP
DIMENSIONS		SNMP	SNMPv1/v2; MIB-II; Ethernet-like MIB; Bridge; MIB; 802.3MAU; 802.11 MIB; Private MIB; ORINOCO MIB; RFC 1157; RFC 1213; RFC 1643; RFC 1493; RFC 2668
PACKAGED	22.5 x 15.5 x 14.75 in (571 x 394 x 375 mm)	MTBF AND WARRANTY	100,000 hours; 1-year on parts and labor
UNPACKAGED	12.6 X 12.6 X 3.5 in (320 X 320 X 89 mm)	PACKAGE CONTENTS	<ul style="list-style-type: none"> Tsunami QuickBridge.11 Model 2454-R, 5054-R, or 5054-R-LR Radios with Integrated Antennas (Qty 2) 50m (164 ft) Outdoor-Rated Ethernet Cables (Qty 2) Sets of wall/ pole mounting brackets (Qty 2) Power Injectors for 2454-R and 5054-R (Qty 2) Country Specific Power Cords (Qty 2) Ethernet Cable Weather-Proof Plugs (Qty 2) Documentation Software CD-ROM
WEIGHT		RELATED PRODUCTS	Tsunami MP11 2454-R, 5054-R, 5054-R-LR, ORINOCO Outdoor Mesh AP-4000MR-(LR) and AP-4900MR-(LR), Power Over Ethernet (PoE) Surge Arrestor (P/N #: 70251) Spare Power DC Injector for Tsunami MP11 or QB.11 (-R model ONLY) (P/N #: 69823), ServPak for Enhanced Support (US/CAN Only), Worldwide Extended Warranty
PACKAGED (per unit)	35 lbs (15.9 kg)		
UNPACKAGED (per unit)	6 lbs (2.72 kg)		
ENVIRONMENTAL SPECS			
TEMPERATURE:			
OPERATING	-33° to 60°C (-27.5° to 140° Fahrenheit)		
STORAGE	-55° to 80°C (-41° to 176° Fahrenheit)		

For detailed technical specifications, please go to <http://www.proxim.com/products/bwa/point/>

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DS_0806_QB11SERIES_A4

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