



TeraBridge 5345 and 5845

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.

Highest Link Reliability

Proxim’s TeraBridge 5345 and 5845 are point-to-point, high capacity, all outdoor radios optimized for backhaul of Ethernet or traditional telecommunications converged voice and data networks. They feature license-free radio operation in the UNII or ISM 5 GHz bands with a choice of either DS3 or 10/100 Base-T digital interfaces. The field-proven TeraBridge series is one of the most reliable license-free wireless solutions available today. Full duplex operation with near-zero latency ensures reliable operation and unlimited consecutive point-to-point links. With a range of up to 40 miles, the TeraBridge 5845 takes the TeraBridge family to unprecedented distances and opens a whole new range of applications.

Unprecedented Cost Effectiveness

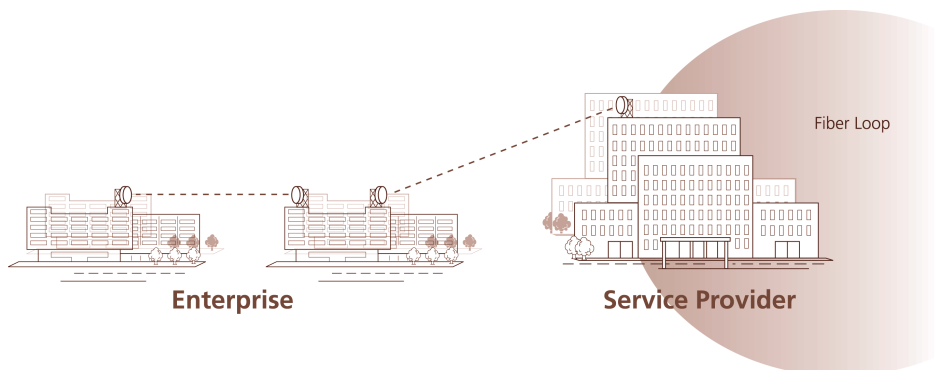
Proxim’s full-duplex TeraBridge systems enable customers with truly affordable broadband wireless solutions for today’s last-mile applications. Since they work in the license-free 5 GHz bands, there are no spectrum licenses to purchase and no expensive trenching required – enabling you to provide connectivity at a price point that won’t dramatically impact CapEx and OpEx budgets.

Superior Design and Performance

Proxim’s TeraBridge 5345 and 5845 are ideal high-capacity solutions for Wireless Internet Service Provider’s Networks, cellular operators needing to upgrade and expand their networks, telecom carriers looking to add capacity to their networks, and for private enterprises wanting to enhance Internet access throughout their networks.

Key Features

- TeraBridge 5345: 5.3 GHz UNII Band full-duplex Radio for Short to Medium Range Links
- TeraBridge 5845: 5.8 GHz ISM Band full-duplex Radio for Links up to 40 Miles
- Frequency Division Duplexing (FDD) Operation
- Up to three channels per frequency band, software selectable
- Very Low Latency Performance
- 1x Telco-rated DS3 interface, with an additional 1Mbps full-duplex wayside channel available, or 2x 10/100 Base-T Ethernet interfaces
- 45 Mbps actual payload throughput each way (90Mbps aggregate)
- SNMP compliant and Web Browser Management for easy and intelligent installation/management
- All-weather outdoor unit with an extended temperature range of -33° to + 60°C



TeraBridge 5345 and 5845 Technical Specifications

TERABRIDGE 5345 AND 5845	
PRODUCT MODELS	
604-900000-001	TeraBridge, 5.3 GHZ, 45 Mbps full-duplex, DS-3
604-900001-001	TeraBridge, 5.3 GHZ, 45 Mbps full-duplex, 10/100
604-900002-001	TeraBridge, 5.8 GHZ, 45 Mbps full-duplex, DS-3
604-900003-001	TeraBridge, 5.8 GHZ, 45 Mbps full-duplex, 100/100
SYSTEM SPECS	
FREQUENCY BANDS	5345: UNII: 5.250-5.350 GHz 5845: ISM: 5.725-5.825 GHz
FREQUENCY RANGE	Full Duplex in the 5,250-5,350 MHz (5345) or 5,725-5,825 MHz (5845)
CAPACITY OPTIONS	<ul style="list-style-type: none"> • 1x Telco-rated DS-3 interface (DSX-3, per Bellcore GR-499-CORE), with an additional 1 Mbps full-duplex wayside channel available • 1x 10/100 Base-T Ethernet (per IEEE 802.3), switched, auto-negotiate • 1x 10/100 Base-T Ethernet (per IEEE 802.3), switched, auto-negotiate or user-selectable speed and duplicity
CHANNEL BANDWIDTH	16 MHz
CHANNEL CENTER	
5345 FREQUENCIES	Channel 1 Tx-5.262 GHz / Rx-5.322 GHz Channel 2 Tx-5.270 GHz / Rx-5.330 GHz Channel 3 Tx-5.278 GHz / Rx-5.338 GHz
5845 FREQUENCIES	Channel 1 Tx-5.737 GHz / Rx-5.797 GHz Channel 2 Tx-5.745 GHz / Rx-5.805 GHz Channel 3 Tx-5.753 GHz / Rx-5.813 GHz
EXT ANTENNA CONNECTOR	50 ohm, N-Type Female
DIGITAL INTERFACE - DS-3 VERSION	
TYPE	1 x DS3 per GR-499-CORE and 2 x 10/100 Base-T Ethernet per IEEE 802.3
OVER-THE-AIR DATA RATE	44.736 Mbps Full-Duplex, and 1 Mbps Full-Duplex wayside channel for Ethernet traffic
LINE CODE	B3ZS, all DS3 applications supported
INTERFACE	75 ohms unbalanced Coaxial Connections
CONNECTORS	TNC (75 ohms)
DIGITAL INTERFACE - ETHERNET VERSION	
TYPE	2 x 10/100 Base-T Ethernet per IEEE 802.3
OVER-THE-AIR DATA RATE	45 Mbps, Full Duplex
MAX CABLE LENGTH	300 feet (100 meters)
TRANSMITTER	
OUTPUT POWER (CONFIGURABLE)	5345: -1 dBm (MAX) ¹ 5845: +16 dBm (MAX)
TRANSMIT ATTENUATION	1 - 30 dB adjustable below maximum power
FREQUENCY STABILITY	+/- 5 ppm
MODULATION	16 QAM

APPLICATIONS

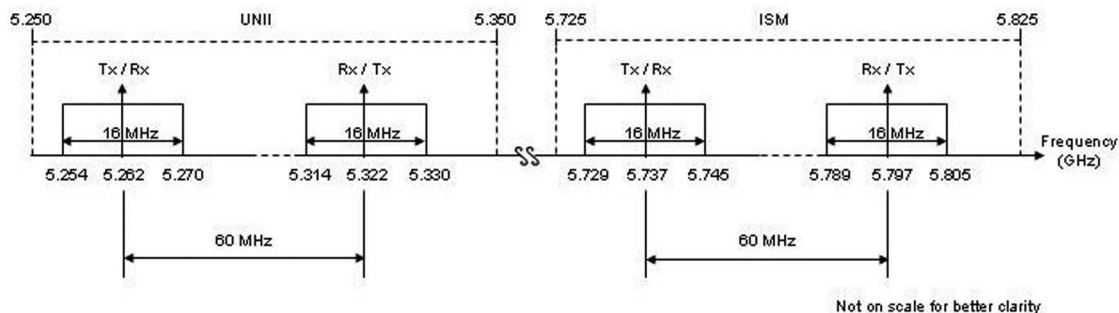
- Point-to-point Wireless Bridge
- Enterprise LAN and PBX extension
- WAN connection redundancy
- ISP remote POP
- ISP direct customerconnections using point-to-point
- Multipoint backhaul at DS-3 performance
- Extension of an existing fiber network

¹ For systems deployed outside the United States, i.e., not constrained by FCC rules and regulations, the maximum output power of a TeraBridge 5345 can be set to +10 dBm. However, customers must comply at all times with their local rules and regulations set by the regulatory boards of their respective countries in regards to the maximum allowed transmit power coming out of an intentional RF emitter device such as the TeraBridge.

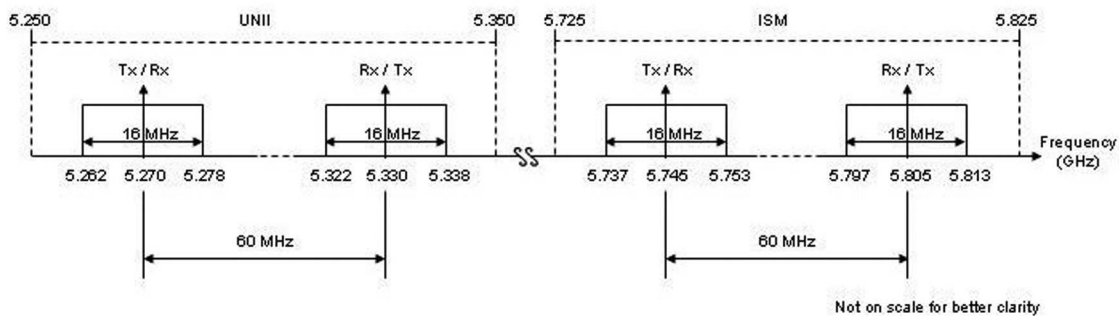
TeraBridge 5345 and 5845 Technical Specifications (Cont'd)

TERABRIDGE 5345 AND 5845											
RECEIVER											
TYPE	Double Heterodyne										
BER/SENSITIVITY	10 ⁻⁹ -78 dBm or better, including Forward Error Correction (FEC)										
MAX RF INPUT LEVEL	-35 dBm										
UNFADED BER	Typically better than 10 ⁻¹⁰										
FREQUENCY STABILITY	+/- 5 ppm										
ADJACENT CHANNEL REJECTION	>/= 40 dB (RF bandwidth of </= 16 MHz)										
NETWORK MGMT											
SNMP	MIB-II Support and Private Functions										
EMS/NMS SUPPORT	Standard SNMP-based EMS, NMS, or Web Browser User Interface										
CRAFT INTERFACE	RS-232 CLI										
STATUS INDICATORS AND DIAGNOSTICS											
EXT LED INDICATORS	Power/Local Alarm, RF Link, DS3 Input, Ethernet Link x 2										
ALARMS	DS3 LOS, AIS, Radio TX, Radio RX, BER Threshold										
STATUS	NMS IP Addresses, BER, TX Power, Receive Signal Level, Loopback Test Status, DS3 Input, Ethernet Input										
CONFIG COMMANDS	NMS IP Address, TX Power, TX Mute, Frequency, RSL, BER Alarm, Loopback Tests										
DIAGNOSTIC TESTING FEATURES	Radio/Local/Remote Loopback, Pseudo AIS										
PERFORMANCE MONITORING	Receive Signal Strength Indicator (RSSI)										
POWER											
INPUT VOLTAGE RANGE	+/- 48 VDC (+/- 21-60 VDC), 100-240 VAC (external power supply)										
POWER CONSUMPTION	30 Watts maximum										
ENVIRONMENTAL											
TEMPERATURE RANGE	-27° to +140° F (-33° to +60° C)										
ALTITUDE	15,000 ft (4,500 meters)										
HUMIDITY	Outdoor, all-weather enclosure (100%, non-condensing)										
MECHANICAL											
DIMENSIONS	12.0 x 12.0 x 4.0 in (305 x 305 x 98 mm)										
WEIGHT	11 lbs (5.0 kg)										
FCC CERTIFICATION											
	<table border="0"> <tr> <td>5345</td> <td>5845</td> </tr> <tr> <td>OEWCX-DS3-53G</td> <td>OEWCX-DS3-58G</td> </tr> <tr> <td>FCC Part 15.407</td> <td>FCC Part 15.247</td> </tr> <tr> <td>Subpart E</td> <td>Subpart C</td> </tr> <tr> <td>(UNII certification)</td> <td>(ISM certification)</td> </tr> </table>	5345	5845	OEWCX-DS3-53G	OEWCX-DS3-58G	FCC Part 15.407	FCC Part 15.247	Subpart E	Subpart C	(UNII certification)	(ISM certification)
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Subpart E	Subpart C										
(UNII certification)	(ISM certification)										
WARRANTY	1 year										
PACKAGE CONTENTS	Complete Hop: <ul style="list-style-type: none"> • TeraBridge High Band Radio (Qty 1) • TeraBridge Low Band Radio (Qty 1) • Power Supply Kit (Qty 2) • Mounting Kit (Qty 2) • Documentation 										
RELATED PRODUCTS	TeraBridge Ethernet or DS-3 Cable Kits (include cables for complete link), Lightning Protectors for TeraBridge Link, Extended Warranty, ServPak (US/CAN only)										

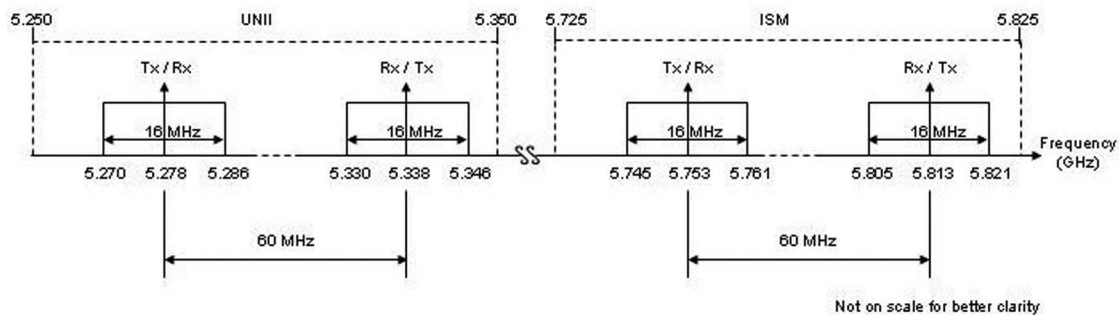
Channel 1 Low / High Bands



Channel 2 Low / High Bands



Channel 3 Low / High Bands



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

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