



TeraOptic 4221e

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

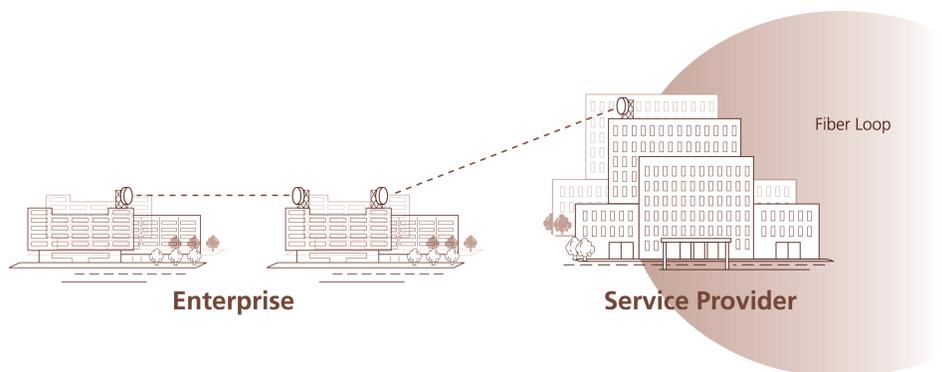
Proxim Wireless is a global provider in scalable broadband wireless networking. From Wi-Fi to wireless Gigabit Ethernet – our WLAN, mesh, point-to-multipoint and point-to-point products are available through our extensive global channel network.

Description

The TeraOptic 4221e is the latest in a line of high-bandwidth, carrier-grade systems developed by Proxim. It is unique among our solutions in that it operates via free-space optics and thus does not use radio frequency. The system is a cost-effective solution for high-bandwidth connectivity at ranges less than one kilometer, and is ideal for deployments such as mobile wireless backhaul, single customer access, multi-tenant building access, enterprise E1/T1, Fast Ethernet extension and LAN-to-LAN or campus connectivity.

Key Features

- Designed for outdoor installations providing bandwidths of 125 Mbps independent of transport protocol
- Ideal for dense metro deployments in the range of 20 meters to 1 kilometer
- Operates at a wavelength of 850 nm and is completely eye-safe, with a Class 1 IEC/CDRH rating, which means no warning labels or access restrictions are required
- License-free operation worldwide eliminates the need for spectrum licensing or frequency planning
- Provides reliable performance using high-performance lasers with a mean time between failures (MTBF) of one million (1,000,000) hours
- Lightweight, advanced industrial design includes an integrated optcalscope for ease of alignment and high/low power settings for optimized performance
- Design includes advanced laser delivery technology which maximizes availability while maintaining eye safety
- Includes built-in management functionality using Simple Network Management Protocol (SNMP) version 1
- Power supplies and power cords included



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Technical Specifications

TERAOPTIC 4221E	
FSO PERFORMANCE	
NOMINAL WAVELENGTH	850 nm
FWHM DIVERGENCE	6 mrad
AVERAGE/PEAK OUTPUT POWER	20 mW / 40 mW
APERTURE DIAMETER	3.14 in (80 mm)
FULL FIELD OF REGARD	6 mrad
LASER TYPE	VCSEL
DETECTOR	Silicon APD
OPERATING RANGE	
MINIMUM TO MAXIMUM	65.6 ft to 0.62 mi (20 m to 1 km)
CLEAR AIR MARGINS	40 dB @ 20 meters 16 dB @ 500 meters 10 dB @ 1,000 meters
INTERFACES	
DATA	125-Mbps, Duplex MMF, 1325 nm, SC connector
MANAGEMENT	IEEE 802.3 100Base-FX, Duplex MMF, 1325 nm, SC connector
INSTALLATION	IEEE 802.3 10/100Base-T, RJ-45
POWER	Three-Way, 10 to 16-AWG Terminal Block
MANAGEMENT	
INSTALLATION TOOLS	Laptop-based software provided
COMPLIANCE	
ELECTRICAL	UL60950 cUL - CSA C22.2 No. 60950 CE - IEC60950
LASER SAFETY	CDRH - Class 1 (21 CFR 1040 per Laser Notice No. 50) IEC - Class 1 (60825-1, Amendment 2 (2001-01))
ELECTROMAGNETIC	FCC - Class A, Title 47, Vol. 1, Part 15 CE - EN55022 CE - EN55024
POWER	
INPUT VOLTAGE	-40 to -57 VDC
MAX POWER CONSUMPTION	75 Watts
MAX INPUT CURRENT	1.5 Amps at -48 VDC
OUTDOOR POWER MODULE	
INPUT VOLTAGE	100 to 230 VAC, 50/60 Hz
MAX POWER CONSUMPTION	60 Watts
MAX INPUT CURRENT	0.6 to 0.26 Amps
DIMENSIONS	16.2 x 10.9 x 6.5 in (412 x 277 x 165 mm)
WEIGHT	12.8 lbs (5.8 kg)
ENVIRONMENTAL AND MECHANICAL	
TEMPERATURE	
OPERATING	-40°C to 55°C
STORAGE	-45°C to 60°C
RELATIVE HUMIDITY	Up to 95%, non-condensing
DIMENSIONS	19 x 14.5 x 14.5 in (483 x 368 x 368 mm)
WEIGHT	20.5 lbs (9.3 kg)
PACKAGE CONTENTS	<ul style="list-style-type: none"> • TeraOptic 4221e Transceivers (Qty 2) • Outdoor Mounting Kit, 4 to 4.5 in pole (Qty 2) • Alignment Tools and Mount (Qty 2) • CD and Manual (Qty1)

APPLICATIONS

- Point-to-point Wireless Bridge
- Enterprise LAN and PBX extension
- WAN connection redundancy
- ISP remote POP
- ISP direct customer connections using point-to-point
- Extension of an existing fiber network

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

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