



GE60

60 GHz Gigabit Ethernet Wireless Links

60 GHz WIRELESS LINKS FOR HIGH-BANDWIDTH APPLICATIONS

BridgeWave is the leading supplier of gigabit RF connectivity solutions for service provider, government, military and enterprise applications. BridgeWave Gigabit Ethernet links extend network operator fiber to provide high-capacity access and backhaul, as well as extending enterprise LANs between buildings and sites.



GE60

FEATURES

PERFORMANCE:

- License-free operation in the U.S. and Canada
- Full rate, full duplex, Gigabit Ethernet
- Interference-free operation enabling high-density deployments
- Low latency for fiber-equivalent performance
- Forward Error Correction provides maximum link range

WIRELESS VIRTUAL FIBER SOLUTIONS FOR:



Enterprise

Server centralization, remote data storage and backup, leased line replacement.



Healthcare

Secure, HIPAA-compliant connectivity, medical office, lab network access, real-time imaging & records, application connectivity.



Education

High-performance campus connectivity, Wi-Fi and security camera backbone.



Government/Municipalities

Video surveillance systems, traffic control and monitoring, Wi-Fi/4.9GHz backhaul.



Service Provider

High-capacity business services, fiber extensions, cellular/Wi-Fi/WiMAX backhaul, redundant fiber overlays, mesh.



Mobile Backhaul

Future-proof full-rate gigabit backhaul for next generation 4G/LTE/WiMAX backhaul.

SECURITY:

- Highly secure narrow beamwidth antennas
- Secure Management software option provides HTTPS management access and RADIUS authentication (see Advanced Security datasheet)
- AES Encryption hardware option provides the ultimate level of full line-rate data protection (see Advanced Security datasheet)

RELIABILITY:

- Rigorous HALT/HASS testing; 28-Year MTBF
- Up to 99.999%, carrier-grade availability

EASE-OF-USE:

- Connects directly to standard network equipment
- All-outdoor, compact design
- Low voltage power cabling
- Rapid & flexible deployment
- Embedded web and SNMP based network management agent

CONNECTIVITY RANGES

GE60

Up to .75 Mile
(1.2 km)



Specifications

	GE60 Gigabit Ethernet
Data Rate	1000 Mbps full-duplex
Latency	< 40uSec
Link Budget	150.5 dB @ 10 ⁻¹² BER 152.5 dB @ 10 ⁻⁶ BER
RF Interface	58.1 GHz/62.9 GHz (FDD), digitally modulated (BFSK) with forward error correction RS(204,188) 1.4 GHz bandwidth Min. link distance 65 ft (20 m)
Antenna	Integrated 10 in (25 cm) directional cassegrain Linear polarized (H/V), 40 dBi gain, 1.4° beam
Ethernet Interfaces	1000base-SX with LC connectors - up to 270 m 62.5/125µm MMF, or 500 m 50/125µm MMF 10/100base-TX with RJ-45 connector (with integral surge suppressor) - up to 100 m CAT5 cable Maximum Ethernet frame length: 1632 bytes
Management	Web-based (HTML) embedded management agent: setup, security, status, statistics, software update Secure Management Access (see Advanced Security datasheet for details) SNMP support: MIB-II and BridgeWave enterprise MIB Voltmeter test points: Receive Signal Level and Link Quality RADIUS Authentication, SysLog support
Power	Supplied 100 – 240 VAC input, +24 VDC output, indoor rated power supply (0°C to +40°C). 45 watts max. consumption Max. cable length: 650 ft (200 m) with 12AWG 400 ft (125 m) with 14AWG, stranded wires highly recommended (surge suppressor required)
Mount	Pole mount: 2-4.5 in (5-11 cm) OD Wall mount bracket
Size	Radio/antenna unit: 12 w * 12 h * 6 d (in) / 30 w * 30 h * 15 d (cm) (Not including pole mount hardware)
Weight	Radio: 11.9 lbs (5.4 kg) Mount: 6.6 lbs (3.0 kg)
Environmental	Operating temperature: -33°C to +55°C (-27°F to 131°F) Operating altitude: 14,764 ft maximum (4,500 m)
Wind Loading	50 lbs. force @ 100 MPH
Regulatory	Safety: UL Listed, CE Mark, EN60950, meets FCC 1.1310 general population RF MPE limits RF Certifications: U.S. FCC Part 15.255, Industry Canada RSS-210
Install Kit	Voltmeter test cable, power connectors, visual alignment tool