



FE60U

60 GHz Fast Ethernet Upgradeable 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.

FEATURES

PERFORMANCE:

- License-free operation in the U.S. and Canada
- Full rate, full duplex, Fast Ethernet upgradeable to Gigabit Ethernet
- *Field upgradeable to full Gigabit Ethernet AR60 product using software key* (please refer to AR60 data sheet for upgrade product specifications)
- Interference-free operation enabling high-density deployments
- Low latency for fiber-equivalent performance
- Forward Error Correction provides maximum link range



FE60U

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)

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

FE60U

Up to 1 Mile
(1.6 km)

DATASHEET



Specifications

	FE60U Fast Ethernet Gigabit Upgradeable
Data Rate	100 Mbps full-duplex
Latency	< 220uSec
Link Budget	161.5 dB @ 10 ⁻¹² BER 163.5 dB @ 10 ⁻⁶ BER
RF Interface	58.1 GHz/62.9 GHz (FDD), digitally modulated (BFSK) with forward error correction RS(204,188) 285 MHz 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

* = Refer to AR60 datasheet for upgradeable features



BridgeWave strongly recommends that a link analysis be performed to ensure the system meets the individual application requirements. Please contact BridgeWave Sales.
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