

BridgeLINK-OFDM Wireless Bridge

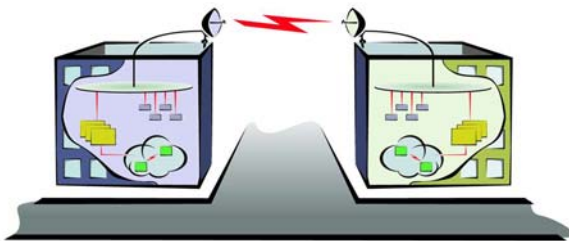


Model BL-535

RadioLAN's award-winning BridgeLINK™ wireless bridges provide reliable, high-performance, outdoor connectivity between network points. Used in place of copper or fiber, BridgeLINKs connect structures that are miles apart, eliminating operating and deployment costs while unifying the networks.

The BridgeLINK-OFDM is a family of 5 GHz, Telco-grade, Fast-Ethernet bridges. Its advanced architecture delivers maximum range and capacity with outstanding performance in a simple, cost-effective package. Using OFDM technology in the 5 GHz ISM, UNII, and North American Public Safety bands, BL-OFDM models offer license-free operation at a range of up to 48 miles and at speeds of up to 108 Mbps.

The integrated design of the BL-535 includes the electronics and antenna in a watertight enclosure. A UL-compliant PoE (Power-on-Ethernet) injector simplifies installation and the RadioNET Manager operating system delivers robust security, configuration, diagnostics and management.



BridgeLINK-OFDM provides:

- Fast Ethernet connectivity between locations
- Simplified installation with Power-over-Ethernet
- User-friendly browser interface and aiming tool

FEATURES

- ☑ Transparent Ethernet Bridge
- ☑ OFDM modulation means interference immunity for NLOS operation
- ☑ 99.8 Mbps TCP/IP data rate
- ☑ Operates in license-free ISM and U-NII bands at 5 GHz
- ☑ Frequency range: 5.25-5.35 GHz and 5.725—5.875 GHz
- ☑ Range of up to 8 miles LOS (13km)
- ☑ Point-to-point & Multipoint support
- ☑ Embedded RadioNET Manager™ Operating System with built-in web server for simple management and configuration
- ☑ Audible Antenna Aiming Tool
- ☑ LED Diagnostics
- ☑ AES or TKIP encryption
- ☑ Quality of Service (QoS) Support for high-grade voice and video service
- ☑ Dynamic Frequency Selection and Transmit Power Control support for international applications
- ☑ Industrial-grade waterproof (IP67)
- ☑ Power-over-Ethernet for simple installation
- ☑ Built-in ESD protection for network and power protection to 16kV
- ☑ High-intensity LED for verification and troubleshooting

The BridgeLINK-OFDM (Model BL-535) wireless bridge delivers high-speed connectivity and a rich set of product features which make it the ideal solution for outdoor connectivity. Based upon an industry standard chipset, the BridgeLINK-OFDM offers speeds up to 100 Mbps and supports the power and frequency negotiation features that make it deployable virtually anywhere in the world. With a range up to 8 miles, the BridgeLINK-OFDM is the ideal solution for broadband extensions and campus networks where performance and reliability are paramount.

Specifications



BL-535e

BridgeLINK-OFDM System

Model Number.....	BL-535
Technology	Orthogonal Frequency Division Multiplexing (OFDM)
Radio Signaling Rate	108 Mbps
Throughput.....	~100 Mbps (when installed within specified range)
Range (USA)	~ 8 miles
Media Access Protocol.....	CSMA/CD for Ethernet, CSMA/CA for wireless
Ethernet Architecture	Transparent bridge
Security	MAC-Address authentication, data encryption
Topology	Line-of-sight, peer-to-peer architecture
Warranty	1 Year parts and labor (return to factory)

BridgeLINK-OFDM (Model BL-535e) ODU (Outdoor Unit)

Network Processor	Atheros AR9342 @ 600MHz
Diagnostics.....	POST - Memory, Ethernet interface, Radio Interface
Ethernet Interface.....	IEEE 802.3 1000BaseT (GigE), RJ-45 Connector, Auto MDIX
Wireless Interface	Atheros AR9280 802.11a/n Chipset
Frequency.....	4.900 & 5.920 GHz U-NII and ISM bands (unlicensed)
Receive Sensitivity	-80 dBm typical @ 54 Mbps — Range -66 to -92 dBm
Transmission power	25 to 1000 mW (+14 dBm to +30 dBm)
Power Consumption.....	13.2 W (@ 24V) (Preliminary)
Antenna Gain / Type.....	23.5 dBi Panel Antenna
Beam width / Polarity	9.4° / Horizontal
Adjustments.....	Azimuth: 360° Elevation: ±75°
Dimensions / Weight.....	14" x 14" x 1.5" - 11 lbs

PoE Adapter (not 802.3af)

Dimensions	2.4" x 2.4" x 1"
Input Power	External 48VDC, .33 amp @ 110-220V Desktop Switcher (Provided)
Ethernet Cable	Unshielded Gel-filled outdoor-rated Category-5e - Watertight RJ-45
Supported lengths.....	15¼ Meters (50') standard—100 Meters (328') Max

Software

Management.....	RadioNET Manager™
Encryption Standards Supported.....	AES

Environmental

Temperature.....	-25° - +85° C (Preliminary)
Relative humidity	96% Maximum
Approvals (Intentional Radiator).....	FCC Part 15.407 (U-NII), Industry Canada RSS-210, FCC Class B, Bellcore GR-63-CORE
Standards Compliance.....	802.11a (signaling) with Security extensions, 802.3 (Ethernet MAC), 802.1Q (VLANs), 802.1i (Security)
Environmental Compliance.....	NEMA4, IP-65, IP-67 (Preliminary)

