

# WAVEBRIDGE®

by Plaintree Systems



Plaintree's WAVEBRIDGE® technology is designed for SMB, Enterprise, Service Providers, Military and Power Users.

WAVEBRIDGE® is the perfect alternative to copper or fiber cables, with the performance of fiber at a fraction of the cost.

## WAVEBRIDGE® LS Series

The WAVEBRIDGE® LS optical wireless system uses LED (Light-Emitting Diode) technology to provide a Local and Wide Area Networking alternative leased circuits, and radio frequency (RF) solutions.

The LS WAVEBRIDGE® series can be used as a bridge to extend or replace conventional cabling systems. The LS Series is designed for short range outdoor and indoor window-to-window applications. Easily installed and transportable the LS Series provides a wide LED beam for easy alignment.

The LS series offers a low cost alternative when connecting buildings, networks or custom projects through line-of-sight technology. With a throughput of 10 -100Mbps, zero interference from microwave or RF frequencies, secure transmission, and rapid deployment, the LS Series is the perfect network extension device for data/voice and video applications.

## Free Space Optics Advantages

- 100% Eye Safe** - Plaintree's FSO units are 100% Class 1 eye safe.
- Ease of Installation** - Mounted and configured within a couple hours.
- Custom Power** - With POE, 12VDC, 48VDC or custom solar.
- Redundant Back-up** - RF or FSO rollover back-up 100 Base-Tx Port.
- LED Wide Beam** - For sway, wind, ease of alignment and reliable link margins.
- Secure** - WAVEBRIDGE® is virtually 100% secure LED Infrared beams.
- License Free** - No license's, right-of-way permits, or frequency allocations costs.

**Point-to-Point LAN Extension**  
**Voice, Data and Video**  
**Wi-Fi Hotspot**  
**Cellular Networks**  
**Emergency Communications**  
**Media Events**  
**Coverage Over Obstacles**

**Secure. Reliable. High Speed.**

## WAVEBRIDGE® LS Series

The WAVEBRIDGE® product family is Canadian made and supports E1/ T1 (ITU-T G.703), 10 Mbps (10 BaseT, IEEE 802.3), 100 Mbps (100 BaseT 802.3u) and 155 Mbps (OC-3, STM-1) interfaces, making it the wireless networking solution of the next millennium.

### LS Series Specifications

Model	WBL S10	WBL S100	WBL S100U Ultra-Wide	WBL S155	WBL S T1/E1	WBL S 4T1/4E1
Data Rate	10Mbps Full Duplex	100Mbps Full Duplex	100Mbps Full Duplex	155Mbps Full Duplex	1 x 1.54 Mbps or 1 x 2.048 Mbps	4 x 1.54 Mbps or 4 x 2.048 Mbps
Distance (meters)	up to 800m	up to 500m	custom	up to 500m	Up to 800m	up to 1600m
Network Protocol	Ethernet	Fast Ethernet	Fast Ethernet	Clear Channel	ATM	ATM
Network Interface	10Base-T (RJ45) x1	100Base-Tx (RJ45) x1	100Base-Tx (RJ45) x1	SPF- LC Fiber Connect	4 x RJ48C	1 x RJ48C
Transmitter	IR - LED Class 1	IR - LED Class 1	IR - LED Class 1	IR - LED Class 1	IR - LED Class 1	IR - LED Class 1
Wavelength	800-900nm	800-900nm	800-900nm	800-900nm	800-900nm	800-900nm
Beam width	17mrad	17mrad	custom	17mrad	17mrad	17mrad
Power	POE or 48V DC	POE or 48V DC	POE or 48V DC	48V DC	48V DC	48V DC
Housing	Weatherproof	Weatherproof	Weatherproof	Weatherproof	Weatherproof	Weatherproof
Operating Temp.	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C	-40° C to 70° C
Relative Humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%
Dimensions	9" x 6.0" x 12"	9" x 6.0" x 12"	9" x 6.0" x 12"	9" x 6.0" x 12"	9" x 6.0" x 12"	9" x 6.0" x 12"
Weight	3.2Kg, 7.5lbs	3.2Kg, 7.5lbs	3.2Kg, 7.5lbs	3.2Kg, 7.5lbs	3.2Kg, 7.5lbs	3.2Kg, 7.5lbs
Mounting Options	Wall/Tower, Roof, Non-penetrating	Wall/Tower, Roof, Non-penetrating	Wall/Tower, Roof, Non-penetrating	Wall/Tower, Roof, Non-penetrating	Wall/Tower, Roof, Non-penetrating	Wall/Tower, Roof, Non-penetrating

These specifications are subject to change without notice. Distances based on clean weather conditions.  
See White Papers-Optical Fade Margin at [www.plaintree.com](http://www.plaintree.com). Distance and coverage of indoor units may be reduced by window attenuation.

#### Optional Accessories

SNMP Monitoring  
120V AC and 240V AC to 48V DC power converters  
RJ48c to RG-59 convertor for E1  
Power over Ethernet Injector  
Redundant Roll-Over Back-up  
Multiplex T1 and 4x100 Mbps,  
Roof, wall and tower mounting kits, Non-penetrating roof mounting tray

#### WORLD-WIDE SALES & DISTRIBUTION

**Toll-free number: +1-888-831-8300**

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