

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® 400/500 Series

The WAVEBRIDGE® 400/500 optical wireless system uses LED (Light-Emitting Diode) technology to provide a Local and Wide Area Networking alternative to wire line, fiber, leased circuits, and radio frequency (RF) solutions.

The 400 WAVEBRIDGE® series is designed for mid-range outdoor applications with a range of 500m-1000m in clear weather conditions. The 500 series can be used as a bridge to extend or replace conventional cabling systems for longer applications. This series is designed for longer ranges 750m - 1500m. These easily installed and transportable the 400/500 Series provides a wide LED beam for easy alignment.

The 400/500 series offers a low cost alternative to fiber 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, this 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 cost

Building to Building Bridge
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® 400/500 Series

With its form factor and sturdy mounting, the series is perfect for connecting your buildings together, Enterprise and SMB's who are looking to extend their LAN network quickly with a high return on investment (ROI).

400/500 Series Specifications

| Model | WB410 | WB4100 | WB4155 | WB510 | WB5100 | WB5155 | WB5 T1/E1 | WB5 T4/E4 |
|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Data Rate | 10Mbps Full Duplex | 100Mbps Full Duplex | 155Mbps Full Duplex | 10Mbps 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) | 1500m | 750m | 750m | 2000m | 1000m | 1000m | 3500m | 2000m |
| Network Protocol | Ethernet | Fast Ethernet | Clear Channel | Ethernet | Fast Ethernet | Clear Channel | ATM | ATM |
| Network Interface | 10Base-T (RJ45) x1 | 100Base-Tx (RJ45) x1 | SPF- LC Fiber Connect | 10Base-T (RJ45) x1 | 100Base-Tx (RJ45) x1 | SPF- LC Fiber Connect | 1 x RJ48C | 4 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 | IR - LED Class 1 | IR - LED Class 1 |
| Wavelength | 800-900nm | 800-900nm | 800-900nm | 800-900nm | 800-900nm | 800-900nm | 800-900nm | 800-900nm |
| Beam width | 17mrad | 17mrad | 17mrad | 17mrad | 17mrad | 17mrad | 17mrad | 17mrad |
| Power | POE or 48V DC | POE or 48V DC | 48V DC | POE or 48V DC | POE or 48V DC | 48V DC | 48V DC | 48V DC |
| Housing | Weatherproof | Weatherproof | 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* | -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% | 5% to 95% | 5% to 95% |
| Dimensions | 15.8" x 15.3" x19" | 15.8" x 15.3" x19" | 15.8" x 15.3" x19" | 15.8" x 15.3" x19" | 15.8" x 15.3" x19" | 15.8" x 15.3" x19" | 15.8" x 15.3" x19" | 15.8" x 15.3" x19" |
| Weight | 9.0Kg, 20lbs | 9.0Kg, 20lbs | 9.0Kg, 20lbs | 9.0Kg, 20lbs | 9.0Kg, 20lbs | 9.0Kg, 20lbs | 9.0Kg, 20lbs | 9.0Kg, 20lbs |
| 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 | 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. Distance and coverage of indoor units may be reduced by window attenuation. Package does not include mounting options

*Heat Shield recommended for temperatures above 80° C

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

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