

# **Product Datasheet**

EZ-BRIDGE® Ultra2-LR



The EZ-Bridge® Ultra2-LR is a long range high capacity 100Mbps+ and high power 250mW outdoor wireless bridge system operating in the 2.4GHz unlicensed spectrum. The complete system allows for ultra high bandwidth connections between 2 buildings up to 8 miles or more apart with good line of sight.

The EZ-Bridge® Ultra2-LR creates a transparent bridge between 2 sides and passes all network traffic including VPN and DHCP. You can think of it like connecting a CAT5 Ethernet cable between the 2 points.

It is the perfect high capacity plug and play solution for connecting the networks in two or more buildings, internet access sharing, remote video surveillance or remote network access. Multiple EZ-Bridge® Ultra2-LR units can be connected in a mesh configuration to allow interconnecting more than two sites.

The system supports 802.11n TDMA and 802.11g OFDM for backward compatibility. The advanced MIMO antenna system offers 18dBi of gain in a compact and visually pleasing package. The antenna also offers great front to back performance which helps reduce interference. A snap-on radome is included to protect the antenna from snow, ice, hail and crazy birds who sometimes like to nest in antennas.

With its password verification, MAC address authentication, SSID suppression and advanced WPA encryption, the system provides the best available wireless data security.

Installation is a snap because of the plug and play features which have been built into the system. Just install the antennas and plug in the power supplies. The units will automatically find their peer and create a secure wireless network link. If changes to the pre-configured settings are desired, they can be easily done thru the built-in web interface from any point on either side of the network. There are no drivers or software that needs to be loaded to the computer.

The antenna can be installed with Vertical Polarization or Horizontal Polarization, depending on customer preference. The corrosion resistant bracket system allows mounting to a pole with up to 2.25" diameter or wall mounting using the included wall mount brackets. The bracket provides +/- 20 degrees vertical tilt and unlimited horizontal adjustment. The system comes with 24V PoE (Power Over Ethernet) power inserters and 2 rolls of shielded and outdoor rated 75' long CAT5 cable assemblies. The shielded outdoor cable helps to protect against EMI from lightning and ESD from wind.

The EZ-Bridge® Ultra2-LR comes complete with all the electronics that are needed for a point to point wireless network bridge installation; including two powerful 18dBi 802.11g/n MIMO antennas with built-in high power electronics, Bracket Kits which accommodate pole or wall mounting, 24V PoE (Power Over Ethernet) power inserters and two 75' Shielded Outdoor Rated CAT5 cable assemblies.

FEATURES	BENEFITS
High Power Electronics and powerful advanced MIMO antenna	Long Range Operation up to 8 miles or more with good line of sight and up to 150 Mbps
True Plug and Play	No driver needed. Pre-configured at the factory for automatic peer to peer communications

64 and 128bit WEP, WPA and WPA2 Encryption	Most powerful data security available
Web-based configuration	Remotely change device configuration or update firmware from anywhere on the network
PoE (Power over Ethernet)	Antennas can be mounted up to 100meter (300') from the power source
Transparent Bridge	Appears to network devices as if an Ethernet cable has been installed between the 2 network nodes. Passes DHCP, VPN and supports multiple MAC addresses

# **TECHNICAL SPECIFICATIONS**

Data Rates: 6-150 Mbps

Operating Distance: up to 15 miles line of sight

**Standards** 

IEEE802.11n, 802.11g, 802.3, 802.3u

**Power Requirements** 

Power Supply: 100-240VAC 50/60Hz EZ-Bridge® Ultra2-LR: 12VDC to 24VDC

Av. Power Consumption: 5.5W

**Regulatory Certifications** 

FCC Part 15 / UL

RF Frequency Band

2412 ~ 2462 MHz

**Available Transmit Power** 

802.11g/n: 4 to 23dBm

**Modulation Technology** 

802.11g: OFDM 802.11n: TDMA

**Operating Channels** 

2.4GHz 12 channels supported at 40MHz width

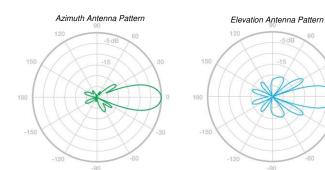
**Receive Sensitivity (Typical)** 

802.11g/n: -94 +/-2dB @ 14Mbps 802.11n: -75 +/-2dB @ 300Mbps

11n: -75 +/-2dB @ 300Mbps

#### Notes:

- All shipments F.O.B. Bluffdale, UT 84065
- EZ-Bridge<sup>®</sup> carries a 1 year warranty



#### **Antenna**

2.4GHz 18dBi Dish Antenna, 8 deg AZ and 8 deg EL Beamwidth, >23dB front to back

# **Network Topology**

Ad-Hoc, Infrastructure

## **Operation Modes**

Point to Point Bridge, Access Point, Client Bridge or Router

**Processor:** Atheros MIPS 24KC 400Mhz **Interface:** 10/100Mbps RJ-45 LAN Port

**Memory:** 32MB SDRAM, 8MB Flash **IP Auto Configuration:** DHCP Client

## Security

MAC Address Filtering, WEP/WPA encryption, Hide SSID in beacons, Layer 2 isolation

## **Management Configuration**

Web-based configuration (HTTP)
Console configuration (SSH)
SNMP Protocol

# Firmware Upgrade

Upgrade firmware via web browser

Antenna Physical Dimensions (diameter x D)

400mm dia x 254mm depth (15.7" dia x 10")

Complete System Weight 9.07 kg (20 lbs)

**Temperature Range** 

Operating: -30°C to 75°C (-22°F to 167°F) Storage: -40°C to 80°C (-40°F to 176°F)



