

Product Datasheet

EZ-BRIDGE-*Ultra5*TM



The EZ-Bridge-*Ultra5*TM is a high capacity 100Mbps and high power 250mW outdoor wireless bridge system operating in the 5GHz unlicensed spectrum. The complete system allows for ultra high bandwidth connections between 2 buildings up to 4 miles or more apart with good line of sight.

The EZ-Bridge-*Ultra5*TM 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-*Ultra5*TM units can be connected in a mesh configuration to allow interconnecting more than two sites.

The system supports 802.11n TDMA and 802.11a OFDM for backward compatibility. The advanced MIMO antenna system offers 22dBi 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 need 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 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-*Ultra5*TM comes complete with all the electronics that are needed for a point to point wireless network bridge installation; including two powerful 22dBi 802.11a/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	Operation up to 4 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
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 12miles line of sight

Standards

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

Power Requirements

Power Supply: 100-240VAC 50/60Hz
EZ-Bridge Ultra5™: 12VDC to 24VDC
Avg Power Consumption: 5.5W

Regulatory Certifications

FCC Part 15 / UL

RF Frequency Band

5180 ~ 5825 MHz

Available Transmit Power

802.11a/n: 4 to 23dBm

Modulation Technology

802.11a: OFDM
802.11n: TDMA

Operating Channels

5GHz 12 channels supported at 40MHz width

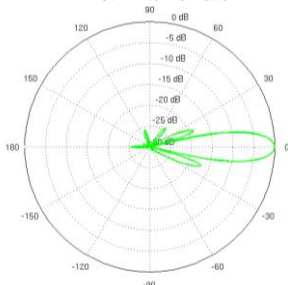
Receive Sensitivity (Typical)

802.11a/n: -96 +/-2dB @ 14Mbps
802.11n: -75 +/-2dB @ 300Mbps

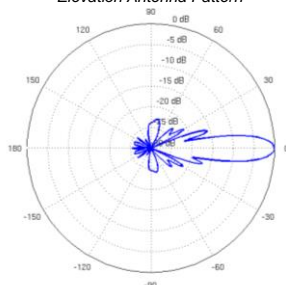
Notes:

- All shipments F.O.B. Bluffdale, UT 84065
- EZ-Bridge carries a 1 year warranty

Azimuth Antenna Pattern



Elevation Antenna Pattern



Antenna

5GHz 22dBi 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)

326mm dia x 254mm depth (12.84" dia x 10")

Complete System Weight 8.6 kg (19 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)

