



Product Datasheet

SolarBase™



The SolarBase™ series are a high power 250mW 802.11bg or 802.11a outdoor wireless off-grid base station or client system powered only by the sun. The system will run with less than 3 hours of peak sun each day. The included Lithium battery provides 24 hours extra battery backup.

The controller can accept power via its POE input port if a secondary power source is available. There is a wire terminal 12V 1.5A power output for temporary power connections.

The external N type female bulkhead connector is ready for connection to any suitable 50Ω antenna. The SolarBase™ comes with a small tri-band omnidirectional antenna for setup and test or for applications requiring short distance

communications. Typical range is up to 20 miles with a suitable external antenna.

The system operates in the 2.4GHz or 5GHz unlicensed frequency spectrum providing real world thruput up to 25 Mb/sec. It complies with the 802.11b and g or 802.11a standards to insure interoperability.

With its advanced EZOS™ software, the SolarBase™ supports multiple operating modes, including; Client Bridge, Client Router, Access Point Bridge, Access Point Router, Access Point + WDS, Repeater and Point to Point. The hardware and software platform supports WEP and WPA encryption, even in point to point mode, for unsurpassed security.

The SolarBase™ comes complete with a Tri-Band Omnidirectional Antenna, Dual Input/Dual output Battery Charge Controller, 12V 19Ah Lithium Battery, 12V 60W Solar Panel, Solar Panel Side of Pole Mount, and all required cables. The vented enclosure is die cast aluminum with powder coat paint. The battery is a 12V 19Ah Lithium LiFePO4 type with >5 year service life. The corrosion resistant bracket system accommodates pole or wall mounting.

FEATURES	BENEFITS
High Power 250mW Electronics	Operation up to 20 miles and up to 25Mbps (with customer supplied antenna)
Standalone, Off-Grid , Autonomous Operation	Can be used anywhere
Advanced EZOS™ Software	No driver needed. Easy configuration thru web interface and remotely. Multiple Operating Modes. Antenna alignment utility. Bandwidth management. Data Logging and statistics graphing.
64 and 128bit WEP, WPA and WPA2 Encryption	Most powerful data security available
Seamless Roaming	Allows users to roam between access points without loss of connection
DHCP Client or Server	Simplifies network administration
MAC Address filtering	Ensures secure network connection in all operating modes
VOIP Friendly QOS	Quality Of Service mechanism to ensure good Voice Over IP performance
SNMP	Compatible with your favorite network management software

TECHNICAL SPECIFICATIONS

Data Rates

2.4 GHz 802.11g: 54/48/36/24/12/9/6 Mbps
2.4GHz 802.11b: 11/5.5/2/1 Mbps
5GHz 802.11a: 54/48/36/24/12/9/6 Mbps

Standards

IEEE802.11b/g, 802.11a, 802.3, 802.3u

Power – Off-Grid

Solar Panel: 12V 60W
Battery: 12V 19Ah Lithium LiFePO4
Min Sun Hours required per day >2.9hr
Extra Backup time: >24hrs

Regulatory Certifications

FCC Part 15 / UL

RF Frequency Band

2400 ~ 2497 MHz
5100 ~ 5850 MHz

Media Access Protocol

Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)

Modulation Technology

802.11g: OFDM (64QAM, 16QAM, QPSK, BPSK)
802.11b: DSSS (CCK, DQPSK, DBPSK)
802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK)

Operating Channels

2.4GHz 11 for North America, 14 for Japan
5GHz 35 channels supported at 20MHz width

Receive Sensitivity (Typical)

802.11g: -73 +2dBm @ 54Mbps
802.11b: -84 +2dBm @ 11Mbps
802.11a: -74 +2dBm @ 54Mbps

Available Transmit Power

802.11g: 50, 100mW
802.11b: 100, 150, 200, 250mW
802.11a: 50, 100, 150, 200, 250mW

Included Antenna - 3dBi/5dBi 2.4/5GHz

External Antenna Connector - N Type - Female Bulkhead 50Ω

Network Topology

Ad-Hoc, Infrastructure

Operation Mode

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

Interface

10/100Mbps RJ-45 LAN Port

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, Telnet

Firmware Upgrade

Upgrade firmware via web browser

Physical Dimensions (L x W x D)

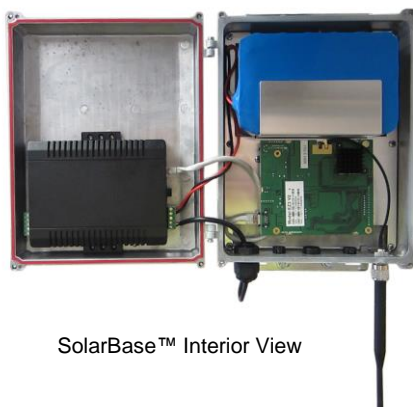
Enclosure: 279 x 216 x 89mm (11" x 8.5" x 3.5")
Panel: 767 x 670 x 30mm (30.2 x 26.4 x 1.2")

Complete System Weight

14.5 kg (32 lbs)

Temperature Range

Operating: -35°C to 65°C (-31°F to 149°F)
Storage: -40°C to 80°C (-40°F to 176°F)



SolarBase™ Interior View

Ordering:

EZSB-2400 2.4GHz 802.11bg 250mW
EZSB-5000 5GHz 802.11a 250mW

Notes:

- All shipments F.O.B. Bluffdale, UT 84065
- SolarBase™ carries a 2 year warranty