

Data Sheet

EZ Connect™ Turbo SMC2482W

2.4GHz 11/22 Mbps Auto-Sensing Wireless Bridge



The EZ Connect™ Turbo 11/22 Mbps Auto-Sensing Wireless Bridge (SMC2482W) is the next evolution in 2.4GHz wireless communication. Designed to connect two or more separated Local Area Networks (usually located in different buildings), the new SMC Wireless Bridge is the easiest alternative to a traditional wired network. This multi-mode device delivers high data rate and allows personnel in a corporate campus environment to access all local and remote network resources. This new EZ Connect Turbo 2.4GHz 11/22 Mbps Auto-Sensing Wireless Bridge is a fast, reliable solution that eliminates the need for expensive cabling and difficult-to-install leased lines.

The new SMC EZ Connect Turbo Wireless Bridge offers three types of configuration modes: Access Point, Point-to-Point Bridge and Point-to-Multi-Point Bridge. With the two bridge configuration options, the EZ Connect Turbo Wireless Bridge device can connect two or more wired LANs together over a 22Mbps wireless connection. This solution is perfect for connecting many different types of situations, including difficult-to-wire locations, branch offices, school or corporate campus environments, frequently changing workplaces, temporary LANs, hospitals and warehouses. By using these built-in configuration modes, anyone can easily share network access to one or several remote buildings.

Using an advanced chipset developed by Texas Instruments, the EZ Connect Turbo Wireless Bridge doubles the standard 802.11b wireless communication to 22 Megabits per second (Mbps). To improve on this performance, the EZ Connect Turbo Wireless Bridge supports a Packet Binary Convolutional Coding (PBCC™) modulation feature to offer the fastest wireless speeds available in the 2.4GHz spectrum and remain compatible with existing 802.11b networks.

The EZ Connect Turbo Wireless Bridge (SMC2482W) offers an auto-fallback feature that provides connectivity at 22, 11, 5.5, 2, and 1Mbps. This new high-performance product supports up to 253 simultaneous wireless network connections and provides a high level of security by supporting 64-/128-/256-bit WEP encryption. To ensure secure network transmission, the EZ Connect Turbo Wireless Bridge also supports an extra security feature with MAC address filtering. The EZ Connect Turbo Wireless Bridge is fully compliant with the IEEE 802.11b standard and is 100% interoperable with all 802.11b-based wireless products.

Features and Benefits

High Performance & Functionality

- IEEE 802.11b Compliant
- 2.4 GHz frequency band
- Removable Antennas for Use with Add On High Gain Antennas
- Point-to-Point, Point-to-Multi-Point Connectivity
- Direct Sequence Spread Spectrum (DSSS)
- 64-bit, 128-bit or 256-bit WEP encryption
- MAC Address Filtering
- Web and Windows-based Configuration and Management
- Power Over Ethernet (designed for use with optional SMCPOE-KIT)
- Supports up to 253 users
- Supports Major Windows Operating Systems

Compatibility

- IEEE 802.11b
- IEEE 802.3, 802.3u
- Windows 98/ME/2000/XP

Product	Model No	Description
EZ Connect Turbo	SMC2482W	2.4GHz 11/22 Mbps Auto-Sensing Wireless Bridge
	SMCPOE-KIT	2.4GHz Power over Ethernet Kit

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Specifications

Standards

- IEEE 802.11b
- IEEE 802.3
- IEEE 802.3u

Data Rate

- Up to 22Mbps with Auto Fallback to 11/5.5/2/1 Mbps

Operating Range

- Up to 350m
(distance performance may be effected by variables such as barrier composition and local environment interference)

Interface

- RJ-45 - 10/100 Mbps
- Power Jack - 2.5mm

Network Configuration

- Infrastructure

Configuration and Management

- Web and Windows-based

Radio Signal Type

- Direct Sequence Spread Spectrum (DSSS)

Media Access Protocol

- CSMA/CA (Collision Avoidance) with ACK

Security

- 64-/128-/256-bit Wired Equivalent Privacy (WEP)

RF Frequency

- 2400MHz - 2497 MHz - Japan Band
- 2400MHz - 2483.5MHz - North America, Europe
- 2455MHz - 2475MHz - Spain
- 2446.5MHz - 2483.5MHz - France

Operating Channel

- 11 Channels (US, Canada)
- 13 Channels (Europe)
- 14 Channels (Japan)

RF Output Power

- 16.5-18 dBm

Sensitivity

- -80 dBm @ 22 Mbps PBCC
- -85 dBm @ 11Mbps PBCC
- -82 dBm @ 11Mbps CCK

Frequency Stability

- Within + 25 ppm

Data modulation type

- BPSK (1 Mbps)
- QPSK (2 Mbps)
- CCK (5.5/11 Mbps)
- PBCC (5.5/11/22 Mbps)

Operating Systems

- Windows 98/ME/2000/XP

Antenna Type

- 2 removable dipole antennas with reserve SMA connectors

Antenna Gain

- 2 dBi

LED Indicators

- Power/Status - RED for power on
- Wireless - Green
- Ethernet - Yellow

Power Consumption

- Operation: Maximum 1.05 A
- Standby: 600mA +/- 20mA

Dimension

- 198 x 150 x 61.5 mm

Weight

- 600g

Compliance

- USA:FCC Part 15 Class B and C
- Europe: ETSI EN 300 328-2 and ETSI EN 301 489-1, -17, EN60950, CE-Mark
- Canada: ISC RSS139
- Japan: Telec RCR STD 33, T66; JETA
- Wi-Fi Compliant

Humidity

- Operating:0% to 70%
- Storage:0% to 95% Non-condensing

Warranty

- Limited Lifetime

SMCPOE-KIT*

SMCCPWR-INJ2 SMCSPLITTER

Input Specification

- Input Voltage: 40V~56V
- Input Current: 400mA, max. @ 48V Input, Full Load
- Efficiency: 60%,min.@ Full Load (including a 100m Ethernet wire) and 48V Input 75%, min.@ Full Load (not including a Ethernet wire) and 48V Input
- Line Regulation: The maximum voltage change on output is $\pm 0.25V$ when input voltage varies within 40V~56V
- Input Line Noise: $\pm 250mV$

Output Specification

- Output Voltage: $5.0 \pm 0.25 V$ from no load to full load
- Output Current: 2.5A, max.
- Dynamic Load Regulation: The maximum voltage change on output is $\pm 0.25 V$ for 50%-100% or 100%-50% load change at any frequency up to 100Hz (Duty 50%)
- Ripple & Spike: $\pm 100mV$

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Interface Requirement

Power Jack Female Connector:

- Connector J1 (to the Power Adapter):
Pin Assignment:
 - Pin 1: Power Adapter Output (48V,Typical)
 - Pin 2: Power Ground

RJ-45 Connector:

- Connector J2 (to the Hub/Switch):
Pin Assignment:
 - Pin 1: Tx+ Signal, connected directly to J4 Pin1 through an Ethernet wire
 - Pin 2: Tx- Signal, connected directly to J4 Pin2 through an Ethernet wire
 - Pin 3: Rx+ Signal, connected directly to J4 Pin3 through an Ethernet wire
 - Pin 4: P2+, connected directly to J4 Pin4 through an Ethernet wire
 - Pin 5: P2-, connected with J2 Pin4
 - Pin 6: Rx- Signal, connected directly to J4 Pin6 through an Ethernet wire
 - Pin 7: P4+, connected with J2 Pin8
 - Pin 8: P4-, connected directly to J4 Pin8 through an Ethernet wire

Temperature Range

- Operating: 0° C - +70° C r.h.
- Storage: 0° C - +90° C r.h.

Humidity

- Operating: 0% - 70% r.h.
- Storage: 0% - 90% r.h.

Protection Function

- Thermal Shutdown
- Over-current Protection: 1.3A, min., 2.2A, typical, 3.2A, max.for Output Current

* SMCPOE-KIT is designed for use with SMC2455W and SMC2482W only.The use of the Power over Ethernet Kit with other Ethernet-ready devices may cause dam age to the devices.

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