



Key Features

- IEEE 802.11 a/b/g/n compliant
- Up to 450Mbps (2.4GHz) + 450Mbps (5GHz) wireless data transmission rate
- Gigabit Ethernet port with IEEE 802.3 at standard PoE support
- Ceiling mount housing and internal antennas for low-profile design
- Web-based and EZ controller software for easy configuration
- AP/WDS mode support
- SNMP V1/ V2c/V3, MIB I/II supported
- WEP/WPA/WPA2 wireless encryption
- IPv4/IPv6 support
- Effective and flexible bandwidth management
- Band steering, guest network, client limit, fast roaming, and client status support

802.11a/b/g/n Dual Radio Concurrent Ceiling Mount AP

Cutting-edge 3 x 3 802.11n brings ultra-high connection speed on your WLAN for diversity of multimedia applications

EAP900H equips with two powerful independent RF interfaces that support 2.4GHz 802.11b/g/n (3T3R) and 5GHz 802.11a/n (3T3R), offering bandwidth up to 450Mbps + 450Mbps to accommodate traffic-intensive applications such as multimedia streaming.

Enhanced Signal Strength to Further Extend WLAN Coverage

Each radio of EAP900H has been enhanced to provide higher signal strength; this will assist to reduce dead spots in your deployed WLAN and boost received signal quality on wireless client devices.

802.3at-compliant Power- over-Ethernet (PoE) for Second Power Sourcing Alternative

EAP900H can be powered by enclosed power adapter or off-the-shelf 802.3at-compliant PoE switches; solving common power sourcing issue in the field where devices are usually placed at drop-ceiling or mounted on walls.

Multiple Operation Modes for Versatile Applications

Each radio of EAP900H can independently operate in 3 different modes, namely **Access Point, WDS AP, or WDS Bridge;** this will allow multiple combinations of operation modes on single device to address deployment requirements.

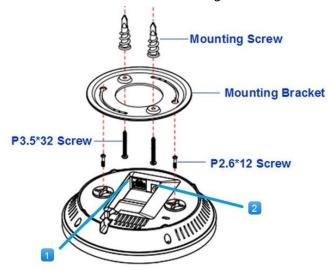
Configuration and Management with Ease

Besides intuitive web-based management, EnGenius EZ Controller software utility provides user extra convenience on applying various configuration settings into devices, enabling prompt WLAN deployment and configuration update.



Advanced WLAN Features to Facilitate Smooth Roaming and Effective Spectrum Usage

For effective spectrum usage, EAP900H has enclosed band steering technology, enabling 5GHz-capable clients to associate with its 5GHz radio and offloading air utilization in 2.4GHz-band. In addition, EnGenius fast roaming minimizes service down-time during handoff from one base station to another.



Physical Interface

- 1. LAN Port (802.3af PoE)
- 2. Power Connector

Technical Specifications

Radio Specification

- Dual Concurrent Radio
- 2.4GHz: 802.11b/g/n with max data rate up to 450Mbps
- 5GHz: 802.11 a/n with max data rate up to 450Mbps
- Transmit Power (combined):
- 2.4GHz: max 28dBm
- 5GHz: max 26dBm
- Maximum transmit power is limited by regulatory power
- Radio Chains / Spatial Streams
- $-3 \times 3 / 3$
- Supported Radio Technology:
- 802.11b: direct-sequence spread-spectrum (DSSS)
- 802.11a/g/n: orthogonal frequency-division multiplexing (OFDM)
- Channelization
- 802.11n with 20/40 MHz channel width
- 802.11a/b/g with 20 MHz channel width
- Supported Modulation:
- 802.11b: BPSK, QPSK, CCK
- 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
- Supported data rates (Mbps):
- 802.11b: 1, 2, 5.5, 11
- 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54
- 802.11n: 6.5 to 450 (MCS0 to MCS23)

Physical Characteristics

- Power Source:
- DC Input: 12 VDC 2A
- PoE: compatible with 802.3at
- Internal High Gain Antennas
- 3 x 3dBi 2.4GHz antennas
- 3 x 5dBi 5GHz antennas
- Interface
- 1 x 10/100/1000 BASE-T Ethernet (RJ45) with 802.3at PoE
- 1 x DC power connector
- 1 x reset button
- Dimensions / Weight
- 161.5 x 41.5mm (Diameter x Height)
- 946g (with box)
- Environment
- Operating temperature: 0°C~40°C
- Operating humidity: 0%∼90% typical
- Storage temperature: -20°C~60°C
- Mounting
- Ceiling mount or wall mount
- Physical Security
- Kensington security slot

Wireless

- Operating Mode
- AP/WDS
- Auto Channel Selection
- Setting varies by regulatory domains
- SSIDs
- Supports up to 8 SSIDs per frequency band
- VLAN Tag / VLAN Pass-through
- Wireless Client List
- Guest Network
- Allocates a separate network segment for guest access within the same WLAN
- QoS
- Supports 802.11e/WMM
- Band Steering
- Moves 5GHz-compatible clients to 5GHz band to ease traffic congestion on 2.4GHz band
- Mobility
- PMKSA support for fast roaming
- Security
- WEP encryption: 64/128/152-bit
- WPA/WPA2 Enterprise/PSK
- Hidden SSID
- MAC address filtering (up to 50 MAC)
- Station separation

Management

- Configuration
- Web interface (HTTP/S)
- SNMP v1/v2c/v3 with MIB I/II and private MIB
- CLI (Telnet/SSH)
- Firmware Upgrade
- Web interface or CLI
- Backup / Restore Settings
- Revert to factory default settings
- Save Configuration as Default:
- Saves the customized configuration as default
- Auto Reboot
- Specifies interval to reboot system periodically
- E-mail Alert / Syslog Notification
- Provides a network monitoring tool for administrators to stay informed upon configuration change or network errors

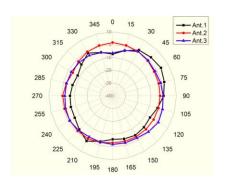
RF Specification

Channel	Data Rate	Transmit Power (Combined, dBm)	Receive Sensitivity (Combined, dBm)
802.11b 2.4 GHz	1 Mbps	28.0	-96.0
	2 Mbps	28.0	-95.0
	5.5 Mbps	28.0	-95.0
	11 Mbps	28.0	-93.0
802.11g 2.4 GHz	6 Mbps	27.0	-92.0
	54 Mbps	24.0	-76.0
802.11a 5 GHz	6 Mbps	26.0	-92.0
	54 Mbps	23.0	-76.0
802.11n HT20 2.4 GHz	MCS 0 / 8 / 16	27.0	-92.0
	MCS 7 / 15 / 23	23.0	-73.0
802.11n HT40 2.4 GHz	MCS 0 / 8 / 16	27.0	-88.0
	MCS 7 / 15 / 23	23.0	-72.0
802.11n HT20 5GHz	MCS 0 / 8 / 16	25.0	-92.0
	MCS 7 / 15 / 23	22.0	-73.0
802.11n HT40 5GHz	MCS 0 / 8 / 16	24.0	-88.0
	MCS 7 / 15 / 23	21.0	-72.0

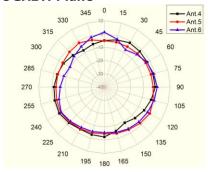
^{*}Maximum transmit power is limited by local regulation.

Antenna Radiation Patterns (Internal Antenna)

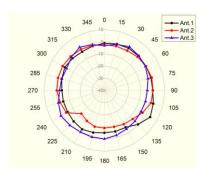
2.4GHz H-Plane



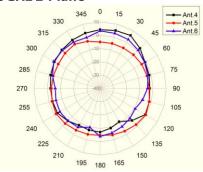
5GHz H-Plane



2.4GHz E-Plane



5GHz E-Plane



Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range can vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment, and mix of devices in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners Copyright © 2013 EnGenius. All rights reserved.

^{*}The supported frequency band is restricted by local regulatory requirements.

^{*}Transmit power is configurable in 1.0dB increments.