

ENH500

802.11a/n Long Range Wireless Outdoor CPE

Key Features

- IEEE 802.11 a/n compliant
- Up to 300Mbps (5GHz)
- 24V Proprietary PoE support
- Waterproof Housing IP65 rated
- AP/CB/CR/WDS Modes
- 4 SSIDs support + VLAN tagged supported
- Web Configuration and EZ controller software
- SNMP V1/ V2c/v3, MIB I/II supported
- WEP/WPA/WPA2 wireless encryption
- Enable to configure IPv4 / IPv6
- PPPoE equipped / PPPoE Pass-through



EnGenius Outdoor Access Points, High Sensitivity and Strong Reliability Solutions under Harsh Environment

ENH500 engineered with the powerful independent RF interface that offers bandwidth up to 300Mbps on 5GHz band for accommodating heavy traffic services. The high-efficient 10dBi directional with polarization antenna provides an optimal, extended real outdoor throughput performance via point to point transmission in long range distances.

Multiple Operation Modes

ENH500 can operate into four different modes with **Access Point, Client Bridge, Client Router** and **WDS Mode**.

Effective Management

ENH500 integrated with Network Management Software “EZ controller” can offer variety uses in constructing scalable wireless network of all possible application and also allow centralized management via user-interface. EnGenius has developed the multiple functions for maximum security, monitoring and easily management to ensure the optimal users’ experience. ENH500 provides wide-range of authentication and encryption standards (including WEP, WPA, WPA2, TKIP/AES and IEEE 802.1X) to enforce the maximum security. Along with Proprietary PoE support excellent long-range network installation when used in conjunction with its outdoor family – ENH900EXT.



Physical Interface

1	Fast Ethernet Port with PoE Input (Main LAN)
2	Fast Ethernet Port (Secondary)
3	Reset Button

SPECIFICATIONS

Wireless Radio Specification

5GHz 802.11a/n	Max 300Mbps
Transmit Power (Maximum Value)	Max 15dBm
	Maximum power is limited by regulatory power
Supported Radio Technology	802.11a/n: Orthogonal frequency-division multiplexing (OFDM)
	802.11n with 20/40 MHz channel width
	802.11a with 20 MHz channel width
Supported Modulation Types	802.11a/n: BPSK, QPSK, 16-QAM, 64-QAM
Supported Data Rates (Mbps)	802.11a: 6, 9, 12, 18, 36, 48, 54
	802.11n: 6.5 to 300 (MCS0 to MCS15)

Power

Power Source	24V proprietary compliant source
	Active Ethernet (Power over Ethernet, PoE)

Antennas

Directional high gain antennas	13dBi 5GHz antenna
	Point to point transmission in the long range distance

Interface

Two 10/100 BASE-T	One port supports 24V proprietary PoE input
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Ethernet Ports

One port supports the extension of internet signal

One reset button

Mechanical & Environment

Dimensions/Weight 260mm (L) x 84mm (W) x 55mm (H)
380g (unit without mounting ki)

Operating Temperature: -20°C~70°C
Humidity: 0%~90% typical

Storage Temperature -30°C~80°C

Harsh Environment Use IP65 rated

ESD Protection 15KV (Certificated Standard is 8KV)

Operation Mode

Access Point / Client Bridge / Client Router/WDS A variety of operation modes to serve multiple constituencies and applications

Easy to Management

Auto Channel Selection Setting varies by regulatory domain

SSIDs BSSID support
4 SSIDs support

VLAN Tag Independent VLAN setting can be enable or disable
Any packet that enters the Device without a VLAN tag will have a VLAN tag inserted with a PVID (Ethernet Port VID)

VLAN Pass-through VLAN pass through over WDS bridge

SNMP &MIB v1/v2c support
MIB I/II, Private MIB

Save Configuration as Default Saves the customized configuration as default value for different customer demands

Client Traffic Status Reports the various main information timely which is required by administrator

QoS Complaint on IEEE 802.11e standard

RADIUS Accounting Help operators to offload 3G to the Wi-Fi seamlessly

Effective Control and Use

CLI Comments Support Setting varies by Regulatory Domains

Distance Control (Ack Timeout)

Multicast Supported

Reinforcement Security

WEP Encryption-64/128/152 bit

WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES)

Hide SSID in beacons

MAC address filtering Filter up to 50 MACs

Wireless STA (Client) connection list Reports the various main information timely which is required by administrator

RF Specification (Aggregated Value)

Channel	Data Rate	Transmit Power (Aggregated, dBm)	Received Sensitivity (Aggregated, dBm)
802.11a 5 GHz	6 Mbps	15.0	-95.0
	54 Mbps	13.0	-75.0
802.11n HT20 5GHz	MCS 0 / 8 / 16	15.0	-94.0
	MCS 7 / 15 / 23	13.0	-73.0
802.11n HT40 5GHz	MCS 0 / 8 / 16	15.0	-93.0
	MCS 7 / 15 / 23	13.0	-72.0

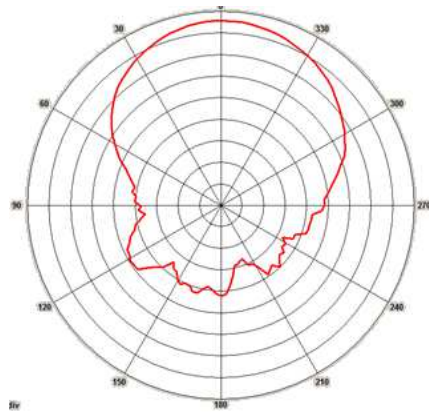
*Maximum performance of the hardware provided. Maximum transmit power is limited by local regulatory.

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

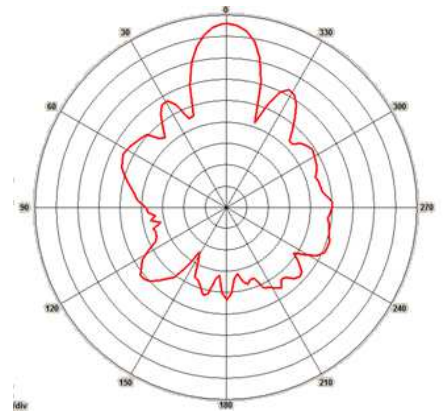
*Transmit power is configured in 1.0dBm increments.

Antenna Specifications (Internal Antenna)

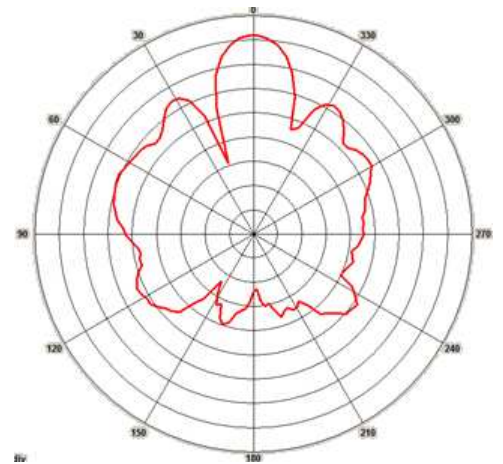
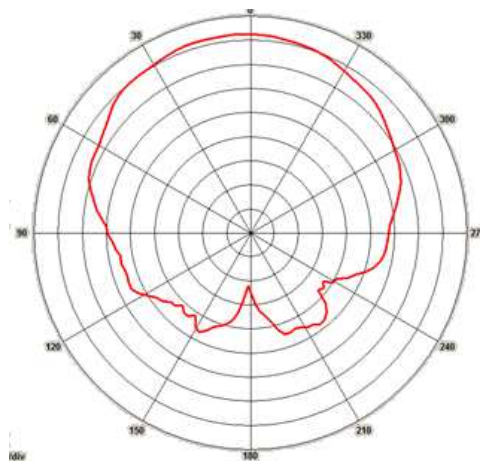
External Antenna	5GHz (H-Port)	5GHz (Port2)
Average Antenna Gain	13dBi	13dBi
Polarization	Linear	Linear
Azimuth Beam-Width	18°	18°
Elevation Beam-Width	58°	85°
VSWR	1:2.0	1:2.0
Dimension	186(L)x63(W)x4.4(H) mm	
Radiation Diagram (TBD)	H-Port : H-Plane	H-Port : E-Plane



V-Port : H-Plane



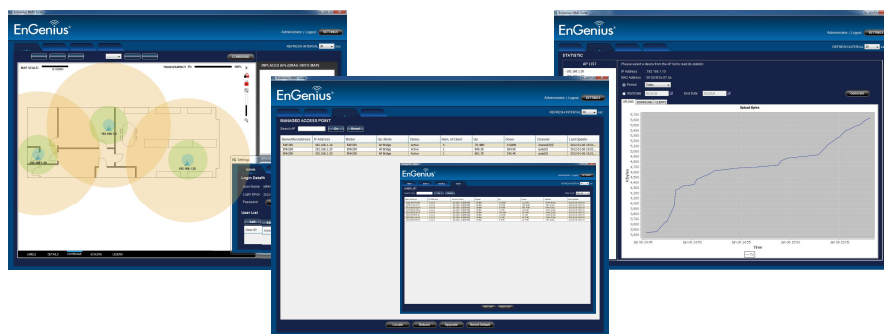
V-Port : E-Plane



Network Management System - EnGenius Zone Controller

In enhancing the real-time functionality of a network, applying the best network management software tool is necessary. Built-in Network Management System, EZ Controller (EnGenius Zone Controller), provides an intelligent tool for IT manager, installer, and network administrators to configure control, and manage all wireless devices within network from one central location. This application ensures the entire network will optimally operate without troubles, glitches and interruptions.

The growing demand of performance related results from service providers or someone involved in an enterprise, you need to provide a huge platform to make it successful. The robust design of EZ Controller can manage different devices simultaneously and precisely, as well as configure the advanced service for wireless clients.



Configure, control and manage EnGenius Enterprise Wireless Devices from one central address

Features:

- Easy-to-use User Interface
- Optimize network performance
- Eliminate downtime
- Check real-time wireless coverage
- Monitor and control each sheet
- Monitor traffic loads by AP, MAC or IP
- Sequential firmware upgrades to deployed APs / Bridges
- Import and archive floor plan maps for radio coverage plotting
- Labels assets by MAC and IP address or user-defined aliases
- Export real-time AP statistics report

address

An intelligent solution for different business environment



Villa



Campus



Office



Plaza

ENH500v2 Data sheet Version 241014

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 © 2014 EnGenius. All rights reserved.

Learn more about EnGenius Solution at www.engeniustech.com.sg