



## Key Features

- IEEE 802.11 a/n compliant
- Up to 300Mbps (2.4GHz)
- 24V Proprietary PoE support
- Detachable 5GHz 5dBi omni antennas
- AP/CB/CR/WDS/Repeater Modes
- Multi-SSIDs with VLAN tagged
- VLAN tag pass-through via the WDS BR mode
- Web Configuration and EZ controller software
- SNMP V1/ V2c/V3, MIB I/II supported
- WEP/WPA/WPA2 wireless encryption
- IPv4/IPv6 support
- Effective and flexible bandwidth management

## 802.11a/n Long Range Wireless Outdoor AP/CB

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

ENS500EXT engineered with the powerful independent RF interface that offers bandwidth up to 300Mbps on 5GHz band for accommodating heavy traffic services. The high-efficient 5dBi omni antenna provides an optimal, extended real outdoor throughput performance via widely coverage in long range distances.

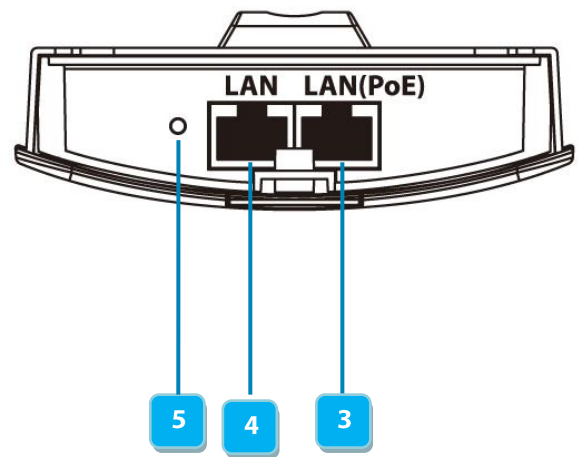
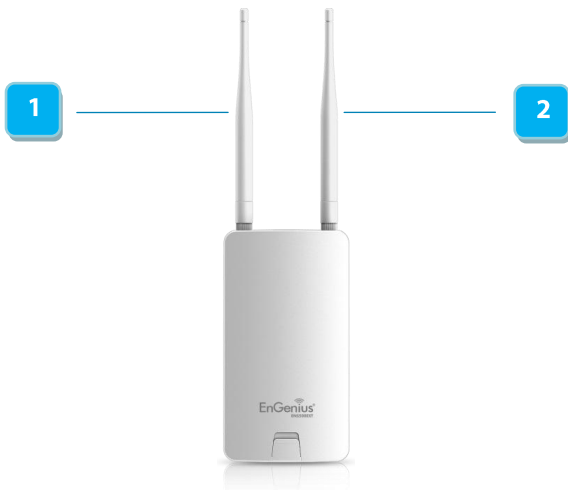
### Multiple Operation Modes

Besides the current operating modes on the **Access Point**, **Client Bridge**, **Client Router** and **WDS Modes**, EnGenius configured the **repeater mode** and **the AP function under the CR mode** for achieving the coverage, reducing the maintenance fee and flexible application for the customers' need.

### Effective Management

ENS500EXT 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. ENS500EXT 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 – ENH710EXT and ENH900EXT.

## Antennas and Physical Interface



SMA Connector		Physical Interface	
1	2	3	Fast Ethernet Port with PoE Input
		4	Fast Ethernet Port
		5	Reset Button

## Specification

## Wireless Radio Specification

- 5GHz 802.11a/n
  - Max 300Mbps
- Transmit Power (Maximum Value)
  - Max 26dBm
  - Maximum power is limited by regulatory power
- Supported radio technologies:
  - 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)
- Power Consumption:
  - Maximum 7W

## Antennas

- Two detachable high gain antennas
  - Detachable 5dBi 5GHz antennas
- Omni-Directional type
  - Provide the optimal coverage
- Compliant with SMA type connector

## Interface

- Two 10/100 BASE-T Ethernet Port
  - One port supports 24V proprietary PoE input
  - One port supports the extension of internet signal
- One reset button

## Mechanical & Environment

- Dimensions / Weight
  - 186mm (L) x 100mm (W) x 29mm (H)
  - 300g
  - Unit, without mounting kit and antennas
- Operating:
  - Temperature: -20°C~70°C
  - Humidity: 0%~90% typical
- Storage:
  - Temperature: -30°C~80°C
- Harsh Environment Use:
  - IP55 rated

## Operation Mode

- Access Point / Client Bridge / Client Router / WDS / Repeater:
  - A variety of operation modes to serve multiple constituencies and applications.
  - Enable the AP function under the CR mode for flexible application

## Easy to Management

- Auto Channel Selection
  - Setting varies by Regulatory Domains
- 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/v3 support
  - MIB I/II, Private MIB
- Save Configuration as Default:
  - Saves the customized configuration as default value for different customer demands.
- Clients Traffic Status:
  - Reports the various main information timely which is required by administrator
- QoS
  - Complaint with 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
- Wi-fi Scheduler
  - Set the schedule for rebooting the device

## 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)	Receive Sensitivity (Aggregated, dBm)
802.11b 2.4 GHz	1 Mbps	-	-
	2 Mbps	-	-
	5.5 Mbps	-	-
	11 Mbps	-	-
802.11g 2.4 GHz	6 Mbps	-	-
	54 Mbps	-	-
802.11a 5 GHz	6 Mbps	26.0	-95.0
	54 Mbps	21.0	-75.0
802.11n HT20 2.4 GHz	MCS 0 / 8 / 16	-	-
	MCS 7 / 15 / 23	-	-
802.11n HT40 2.4 GHz	MCS 0 / 8 / 16	-	-
	MCS 7 / 15 / 23	-	-
802.11n HT20 5GHz	MCS 0 / 8 / 16	26.0	-95.0
	MCS 7 / 15 / 23	21.0	-73.0
802.11n HT40 5GHz	MCS 0 / 8 / 16	26.0	-94.0
	MCS 7 / 15 / 23	21.0	-71.0
802.11ac VHT20 5GHz	MCS0	-	-
	MCS8	-	-
802.11ac VHT40 5GHz	MCS0	-	-
	MCS9	-	-
802.11ac VHT80 5GHz	MCS0	-	-
	MCS9	-	-

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

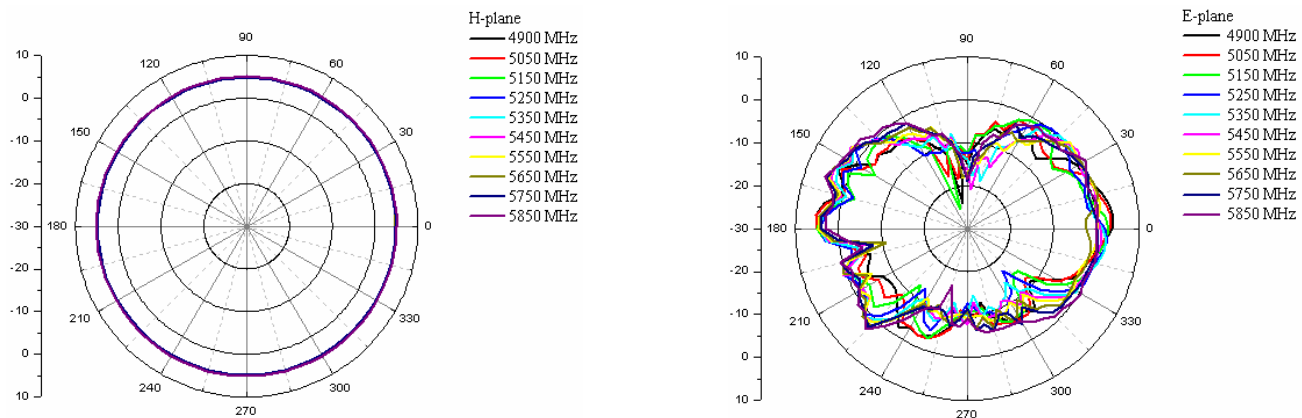
\*The supported frequency band is restricted by local regulatory requirements.

\*Transmit power is configured in 1.0dBm increments.

## Antenna Specifications (External Antenna)

External Antenna	2.4GHz	5GHz
Average Antenna Gain	-	5dBi
Polarization	-	Linear
Azimuth Beam-Width	-	360°
Elevation Beam-Width	-	30°
VSWR	-	1:2.0
Dimension		13(Φ)x200(L) mm

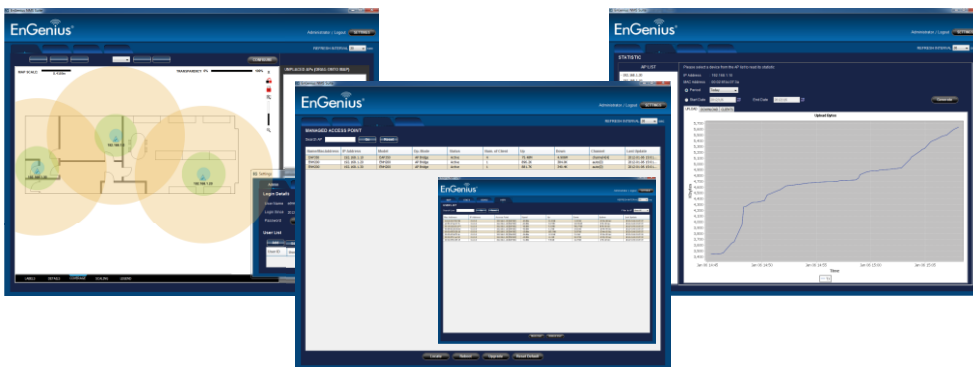
## Radiation Diagram



## 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 location.

### 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 address
- Sequential firmware upgrades to deployed APs / Bridges
- Import and archive floorplan maps for radio coverage plotting
- Labels assets by MAC and IP address or user-defined aliases
- Export real-time AP statistics report

### An intelligent solution for different business environment



Villa



Campus



Office



Plaza