

## Key Features



- AC 866Mbps speed for carrying heavy traffic service
- Built-in 19dBi high gain antenna for long range transmission
- Compliance with 802.3at /Proprietary 48V-54V PoE input
- Supply 802.3af power source via the 2<sup>nd</sup> LAN port
- IP55-rated enclosure for operating under rugged environment
- Superior 4K UHD video or multiple IP surveillances delivering over wireless transmission
- Isolate varied application via Virtual LAN (VLAN)
- Manage and monitor from a single portal without additional tools
- SNMP V1/ V2c/V3, MIB I/II supported
- Securable WEP/WPA/WPA2/WPA Enterprise wireless encryption

## AC866 5GHz Ultra-Long Range CPE Solution

EnGenius Outdoor CPE is specifically designed and engineered to network over great distances and to transfer heavy data at consistent wireless speeds in point-to-point or point-to-multi-points deployment.

### Carry Heavy Traffic Service

EnStationAC engineered with the powerful independent RF interface that offers bandwidth up to **866Mbps** on 5GHz band for accommodating **4k Ultra High Definition (UHD) video and multi-application heavy traffic services** at the same time. The high-gain directional 19dBi antenna could establish stable and reliable line-of-sight or non-line-of-sight connection even in challenging environments.



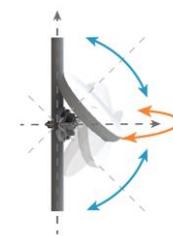
### Operate in Extremely Weather

EnStationAC is easily to install anywhere and its internal electronics have been mounted in an **IP55-rated** enclosure, one of the better waterproof and dustproof rating available, designed to withstand harsh environment conditions including severe and prolonged exposure to sunlight, extreme cold, frost, snow, rainfall, hail and humidity.



### Easily to Mount Anywhere

EnStationAC can be mounted to a variety of surface or to pole with **three-axis position** especially useful in aligning to a matching EnStationAC unit in a varied deployment scenario.



### Power over Ethernet (PoE)

EnStationAC could be powered by EnGenius **802.3at PoE adapter or proprietary 48V-54V** PoE injector from remote-end up to 100 meters (328 feet). EnStationAC could also power **802.3af compliance source** to the other device, such as EnGenius 802.3af compatible IP camera or Access Points. The ideal and scalable extension can assist users to deploy applications easily and save the maintenance cost.

### Prioritizing video streaming over VLAN Per SSID

EnGenius EnStationAC is featured with VLAN IDs that can be associated with a WLAN service set identifier (SSID) to optimize VLAN QoS priority to deliver quality video data transferring.



### Securable Connection without leaking any valuable data

EnStationAC provides wide-range of authentication and encryption standards (including WEP, WPA, WPA2, TKIP/AES and IEEE 802.1X) to enforce the maximum security. The robust encryption will reduce the possibility to leak data under wireless transmission.

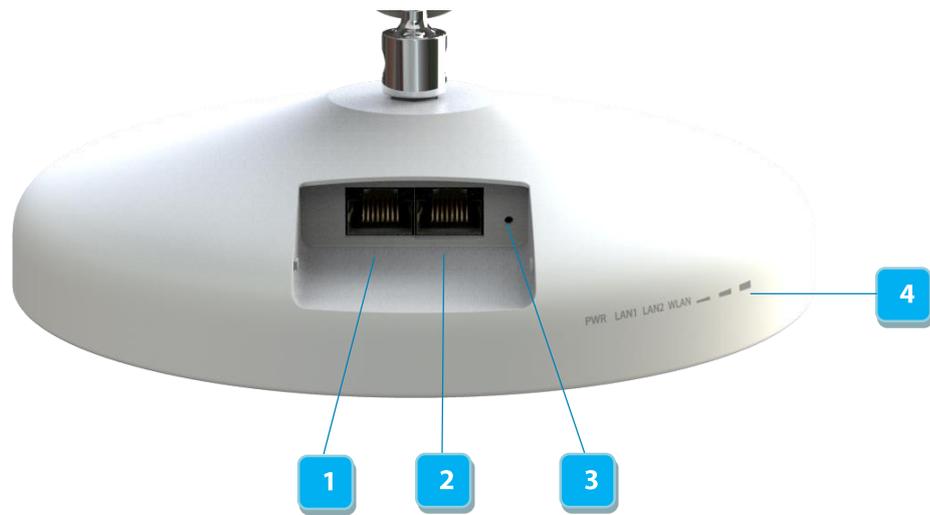
### Intuitive and Comprehensive Management Software

**EZ CONTROLLER**

With the free downloadable EnGenius EZ Controller™ Management Software, EnStationAC that already been deployed on rooftops or hard-to-access locations can be reconfigured to a different operating modes or upgrading system remotely without manually reconnecting to EnStationAC and re-installing on site.

(For more details, please refer the last page for the introduction of EZ Controller™)

## Indicator and Physical Interface



Physical Interface		Indicator	
1	10/100/1000 LAN (Proprietary 48V-54V/802.3at)	4	LED Signal
2	10/100/1000 LAN (802.3af PSE)		
3	Reset Button		

# Technical Specification

## Wireless Radio Specification

- 5GHz ac/a/n
  - Maximum 866Mbps
  - Maximum power is limited by regulatory power
- Support Radio Technology
  - 802.11ac/a/n: Orthogonal frequency-division multiplexing (OFDM)
  - 802.11n/ac: 2x2 MIMO with 2 streams
  - 802.11ac with 20/40/80 MHz channel width
  - 802.11n with 20/40 MHz channel width
  - 802.11a with 20 MHz channel width

## Power Supply

- Power Source
  - 802.3at /proprietary 48V-54V compliant source
  - Active Ethernet (Power over Ethernet, PoE)
- **Power Consumption**
  - TBD

## Antenna

- Directional high gain antenna
  - 19dBi 5GHz antenna
  - Widely range from 5150 ~5925MHz
  - Dual Polarization

## Interface

- Two 10/100/1000 BASE-T Ethernet Port
  - Main port supports 802.3at/proprietary 48V-54V PoE input
  - 2nd port supports the 802.3af PSE output
  - One Reset/Reboot Button

## Mechanical & Environment

- Dimensions / Weight
  - 190mm (D) x 38mm (H)
  - Weight: TBD
  - Unit, without mounting kit
- Operating
  - Temperature: -20°C~60°C (-4°F~140°F)
  - Humidity: 0%~90% typical
- Storage
  - Temperature: -30°C~80°C (-22°F~176°F)
  - Humidity: 0%~90% typical
- Harsh Environment Use:
  - IP55-rated enclosure

## Operating Mode

- Access Point / Client Bridge / WDS
  - A variety of operation modes to serve multiple constituencies and applications.
  - WDS: WDS AP/WDS BR/WDS STA

## Optimal Performance

- Distance Control (Ack Timeout)

- Fast Handover
  - Kick the client which the signal (RSSI) is above the set value from the AP for reducing the interference and optimize the connecting quality
- Auto Channel Selection
- BSSID Support

## Comprehensive Management

- SSIDs:
  - 8 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 BR mode
- VLAN Per SSID
  - Isolate each SSID with individually VLAN
- Clients Traffic Status
  - Reports the various main information timely which is required by administrator
- QoS
  - Complaint with IEEE 802.11e standard
  - Traffic Shaping Per SSID
- RADIUS Accounting
  - Help operators to offload 3G to the wi-fi seamlessly
- Wireless STA(Clients) connection list
  - Reports the various main information timely which is required by administrator

## Intuitive Tools

- SNMP &MIB
  - v1/v2c/v3 support
  - MIB I/II, Private MIB
- Save Configuration as Default
- CLI Support
- Multi Language UI
  - English/Simplified Chinese/German/French/Spanish/Portuguese/Russian
- E-mail Alert
  - Trigger the alert mail when changing the configuration

## Reinforcement Security

- WEP Encryption-64/128/152 bit
- WPA/WPA2 Personal (WPA-EAP using TKIP or AES)
- WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES)
- Hide SSID in beacons
- MAC Filter
  - Filter up to 32 sets of MAC per SSID
- Wireless STA (Client) connection list
  - Reports the various main information timely which is required by administrator

- Https
  - Widely used communications approach for securing communication over a computer network.
- SSH
  - Provide confidentiality and integrity of data over an unsecured network, such as the Internet.

## Regulatory

- CE/FCC/RCM

## 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	-93.0
	54 Mbps	25.0	-76.0
802.11n HT20 2.4 GHz	MCS 0 / 8	-	-
	MCS 7 / 15	-	-
802.11n HT40 2.4 GHz	MCS 0 / 8	-	-
	MCS 7 / 15	-	-
802.11n HT20 5GHz	MCS 0 / 8	26.0	-92.0
	MCS 7 / 15	25.0	-73.0
802.11n HT40 5GHz	MCS 0 / 8	26.0	-89.0
	MCS 7 / 15	25.0	-72.0
802.11ac VHT20 5GHz	MCS0_1SS / 2SS	26.0	-92.0
	MCS8_1SS / 2SS	23.0	-69.0
802.11ac VHT40 5GHz	MCS0_1SS / 2SS	26.0	-89.0
	MCS9_1SS / 2SS	21.0	-65.0
802.11ac VHT80 5GHz	MCS0_1SS / 2SS	26.0	-86.0
	MCS9_1SS / 2SS	21.0	-62.0

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

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

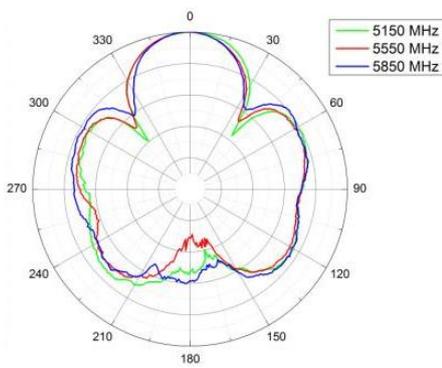
\*Transmit power is configured in 1.0dBm increments.

## Antenna Specifications (Internal Antenna)

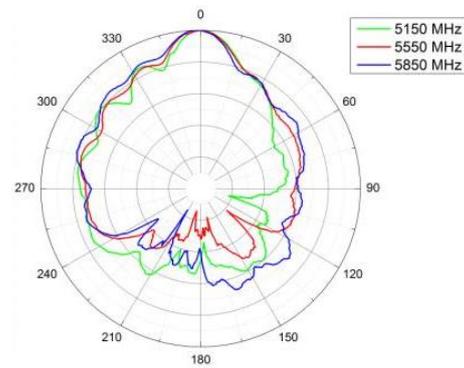
	5GHz (Port1)	5GHz (Port2)
Average Antenna Gain	19dBi	19dBi
Polarization	Linear	Linear
Azimuth Beam-Width	30°	18°
Elevation Beam-Width	18°	30°
VSWR	1:2.0	1:2.0
Dimension	175 x 175 x 5.5 (mm)	

## Radiation Diagram

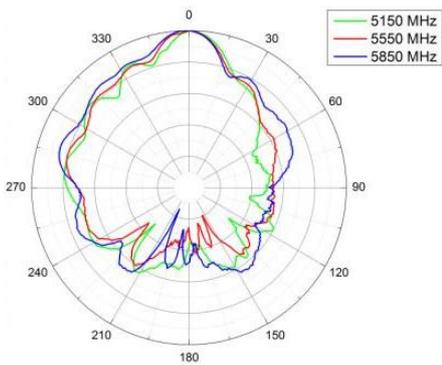
### Port1: E-Plane



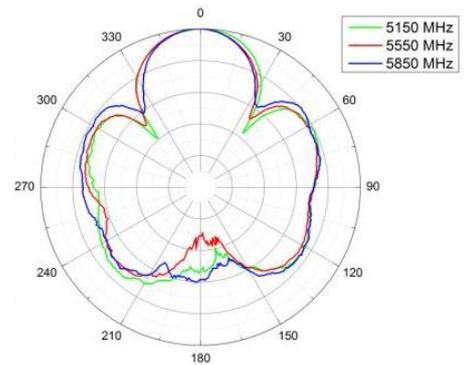
### Port1: H-Plane



### Port2: E-Plane



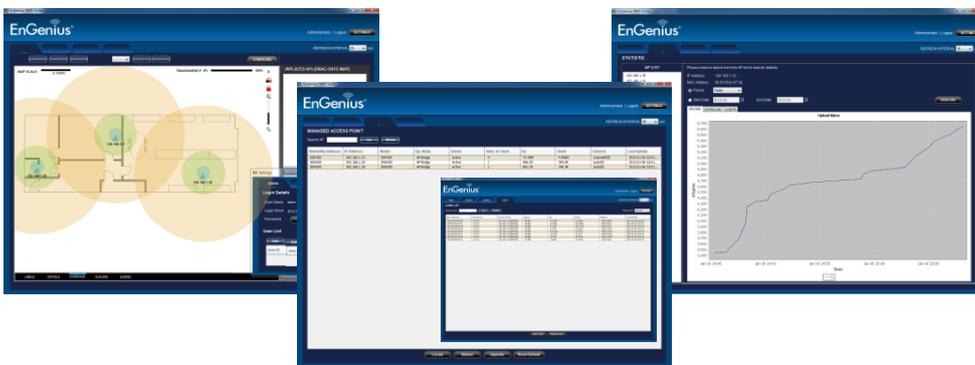
### Port2: H-Plane



## 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 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