



## Key Features

- IEEE 802.11 b/g/n compliant
- Up to 300Mbps (2.4GHz)
- 13dBi Directional high gain antenna
- 24V Proprietary PoE support
- Waterproof Housing IP55 rated
- AP/CB/CR/WDS Mode support
- 4 SSIDs support per radio + VLAN tagged supported
- Web Configuration and EZ controller software
- SNMP V1/ V2c/V3, MIB I/II supported
- WEP/WPA/WPA2 wireless encryption
- IPV4/IPV6 support
- Narrow Bandwidth Support

## N300 2.4GHz Long Range Point to Point CPE

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

EnStation2 engineered with the powerful independent RF interface that offers bandwidth up to 300Mbps on 2.4GHz band for accommodating heavy traffic services. The high-efficient 13dBi directional with polarization antenna provides an optimal, extended real outdoor throughput performance via point to point transmission.

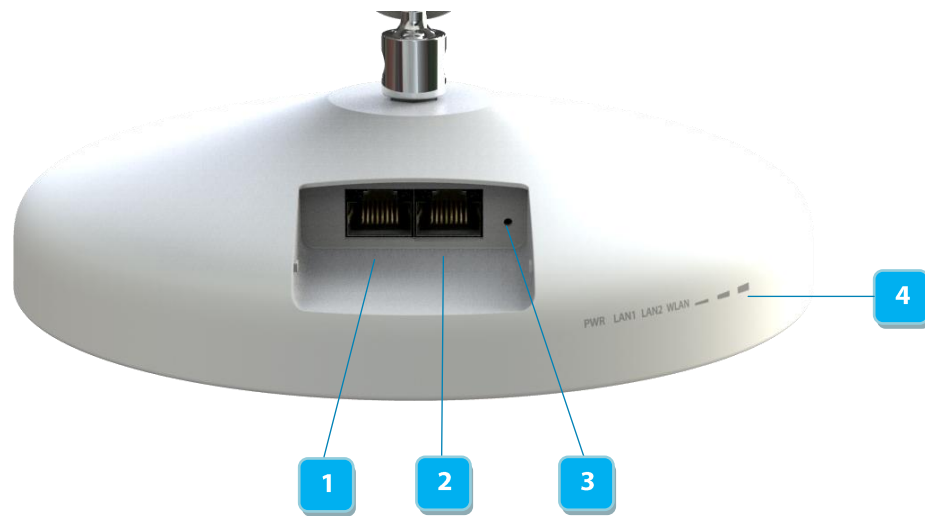
### Multiple Operation Modes

EnStation2 can operate into four different modes with **Access Point**, **Client Bridge**, **Client Router** and **WDS Mode**. With powerful solution and individual interfaces, EnStation2 can connect with the multiple devices and extend the wireless signal easily.

### Effective Management

EnStation2 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. EnStation2 provides wide-range of authentication and encryption standards (including WEP, WPA, WPA2, TKIP/AES and IEEE 802.1X) to enforce the maximum security.

## Indicator and Physical Interface



| Physical Interface |                  | Indicator |            |
|--------------------|------------------|-----------|------------|
| 1                  | 10/100 LAN (PoE) | 4         | LED Signal |
| 2                  | 10/100 LAN       |           |            |
| 3                  | Reset Button     |           |            |

# Specification

## Wireless Radio Specification

- 2.4GHz 802.11b/g/n
  - Max 300Mbps
- Transmit Power (Maximum Value)
  - 2.4GHz: Max 26dBm
  - Maximum power is limited by regulatory power
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum(DSSS)
  - 802.11n: Orthogonal frequency-division multiplexing (OFDM)
  - 802.11n with 5/10/20/40 MHz channel width
  - 802.11b/g with 5/10/20 MHz channel width
- Supported modulation types:
  - 802.11b: BPSK, QPSK, CCK
  - 802.11n: BPSK, QPSK, 16-QAM, 64-QAM
- Supported data rates (Mbps):
  - 802.11b: 1, 2, 5.5, 11
  - 802.11g: 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 7.2W

## Antennas

- Internal high gain directional antennas
  - 13dBi 2.4GHz antenna
- Directional type
  - Point to point transmission in the long range distance

## Interface

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

## Mechanical & Environment

- Dimensions / Weight
  - 190mm (D) x 38mm (H)
  - 460g
  - Unit, without mounting kit
- Operating:
  - Temperature: -20°C~60°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:
  - A variety of operation modes to serve multiple constituencies and applications.

## 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
- Clients 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
- 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          | 26.0                             | -95.0                                 |
|                      | 2 Mbps          | 26.0                             | -95.0                                 |
|                      | 5.5 Mbps        | 26.0                             | -93.0                                 |
|                      | 11 Mbps         | 26.0                             | -93.0                                 |
| 802.11g 2.4 GHz      | 6 Mbps          | 26.0                             | -95.0                                 |
|                      | 54 Mbps         | 23.0                             | -75.0                                 |
| 802.11a 5 GHz        | 6 Mbps          | -                                | -                                     |
|                      | 54 Mbps         | -                                | -                                     |
| 802.11n HT20 2.4 GHz | MCS 0 / 8 / 16  | 26.0                             | -95.0                                 |
|                      | MCS 7 / 15 / 23 | 22.0                             | -73.0                                 |
| 802.11n HT40 2.4 GHz | MCS 0 / 8 / 16  | 26.0                             | -95.0                                 |
|                      | MCS 7 / 15 / 23 | 22.0                             | -73.0                                 |
| 802.11n HT20 5GHz    | MCS 0 / 8 / 16  | -                                | -                                     |
|                      | MCS 7 / 15 / 23 | -                                | -                                     |
| 802.11n HT40 5GHz    | MCS 0 / 8 / 16  | -                                | -                                     |
|                      | MCS 7 / 15 / 23 | -                                | -                                     |
| 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.

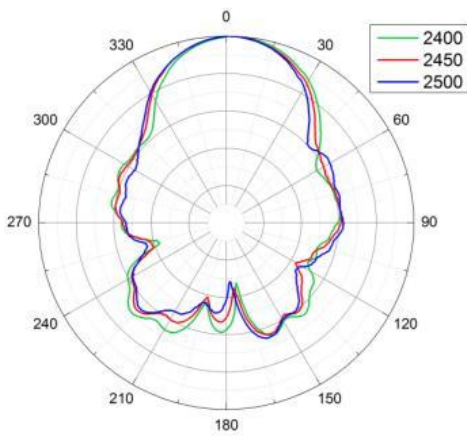
\*Transmit power is configured in 1.0dBm increments.

## Antenna Specifications (Internal Antenna)

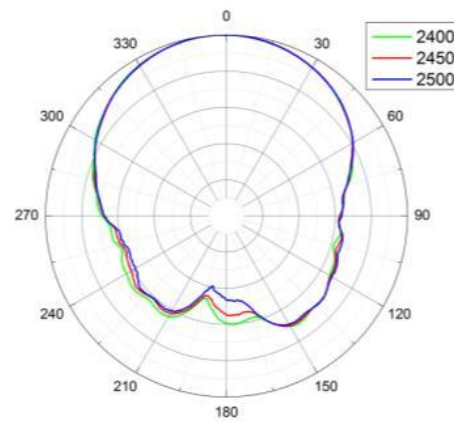
|                       | 2.4GHz (Port1)       | 2.4GHz (Port2) |
|-----------------------|----------------------|----------------|
| Peak Antenna Gain     | 13dBi                | 13dBi          |
| Polarization          | Linear               | Linear         |
| Horizontal Beam-Width | 67°                  | 61°            |
| Elevation Beam-Width  | 33                   | 35             |
| VSWR                  | 1:2.0                | 1:2.0          |
| Dimension             | 175 x 175 x 5.5 (mm) |                |

## Radiation Diagram

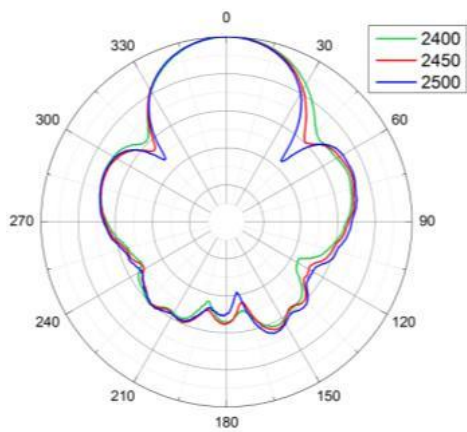
### Port1: E-Plane



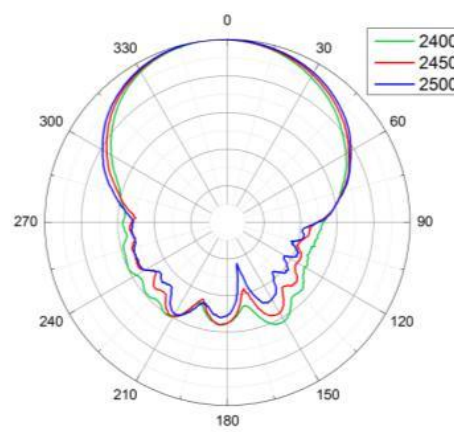
### Port1: H-Plane



### Port2: E-Plane



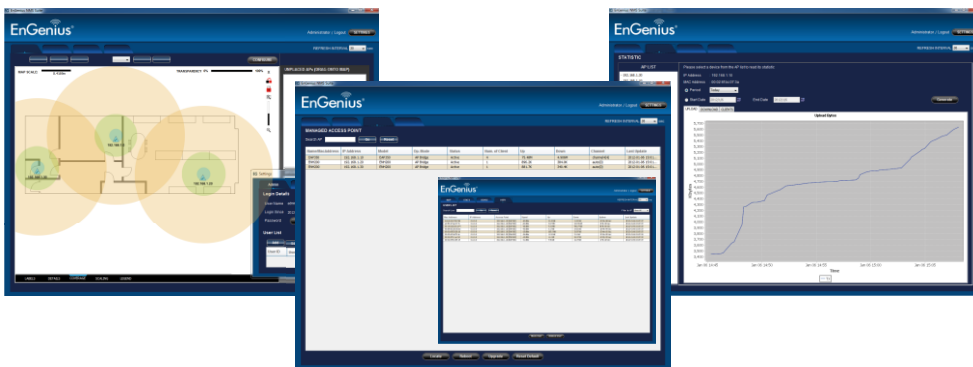
### Port2: H-Plane



## 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