
## Key Features

- IEEE 802.11 a/b/g/n compliant
- Up to 300Mbps Data rate
- Gigabit Ethernet Port with with IEEE 802.3 af PoE Input
- AP/AR/CB/CR/WDS/Repeater Modes
- Configure via web GUI or EZ controller
- Multiple SSIDs (8 SSIDs) + VLAN tagged
- SNMP V1/ V2c/V3, MIB I/II supported
- WEP/WPA/WPA2 wireless encryption
- Traffic Shaping
- Client Limit
- Support IPv4/IPv6

# N300 2.4GHz Indoor Access Point / Client Bridge

**Enterprise class 2 x 2 802.11n single-radio brings 300Mbps connection speed on your WLAN for diversity of applications.** ECB350 equips with an advanced RF interface coupled with 802.11n technologies, offering data transmission rate up to 300Mbps at 2.4GHz band.

**Enhanced Signal Strength and Receive Sensitivity to Further Extend WLAN Coverage**

ECB350 is build the higher strength and sensitivity; the specification will assist to reduce dead in your deployed WLAN and boost received signal quality on both ends of AP and wireless client devices. ECB350 offers multiple SSIDs (up to 8 sets) and each SSID can configure its bandwidth and WLAN security settings, enabling various applications running over WLAN with different levels of security strength and bandwidth limit. ECB350 also provides the advanced features including the traffic shaping and client limit for achieving the optimize connection and stable wireless throughput.

**Efficient Configuration and Real-time Management**

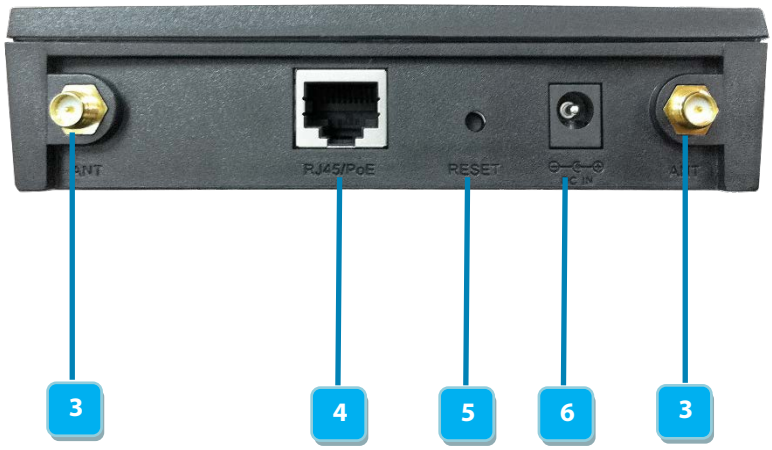
ECB350 can be configured by web configuration or EnGenius Zone Controller (EZ controller) software. With full-featured software built-in, the device allows administrator to control, manage, and optimize the network effectively from a central location which can decrease the maintenance cost greatly. ECB350 can operate into different modes with **Access Point, Access Point Router, Client Router, Client Bridge, WDS Modes and Repeater**.

With powerful solution and individual interfaces, ECB350 can connect with the multiple devices and extend the wireless signal easily.

**802.3af compliant PoE for Alternative Power Sourcing**

ECB350 can be powered by the enclosed adapter, off-the-shelf 802.3af-compliant PoE switches, as well as proprietary 48V PoE input for solving the common power sourcing issue and extend the distance for signal transmission.

## Physical Interface


| Front Side | | Back Side | |
|---|---|---|---|
| 1 | External 5dBi Omni Antennas | 3 | SMA Connector (Connect to Antennas) |
| 2 | LED Signal | 4 | Gigabit Ethernet Port |
| | | 5 | Reset Button |
| | | 6 | DC Jack (DC12V/1A Input) |

## Technical Specifications

**Wireless Radio Specification**

- 2.4GHz 802.11b/g/n
  - Max 300Mbps data rate
- Transmit Power (Maximum Value)
  - 2.4GHz: Max 29dBm
  - Maximum power is limited by regulatory power
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum(DSSS)
  - 802.11g/n: Orthogonal frequency-division multiplexing (OFDM)
  - 802.11n: 2x2 MIMO with 2 streams
  - 802.11n with 20/40 MHz channel width
  - 802.11b/g with 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 450 (MCS0 to MCS23)

**Power**

- Power Source:
  - DC Input: 12 VDC /1A
  - PoE: compatible with 802.3af
  - Active Ethernet (Power over Ethernet, PoE)

**Antennas**

- Two detachable high gain antennas:
  - 5dBi 2.4GHz antennas
- Omni-Directional type:
  - Provide the optimal coverage
- Compliant with SMA type connector

**Interface**

- One 10/100/1000 BASE-T Ethernet Port:
  - Supports 802.3af PoE input
- One DC Jack (12V/1A Input)
- Reset button on the device

**Mechanical & Environment**

- Dimensions / Weight:
  - 135mm (L) x 105mm (W) x 30mm (H)
  - 182g (Unit, without mounting kit and antennas)
- Operating:
  - Temperature: 0°C~50°C
  - Humidity: 0%～90% typical
- Storage:
  - Temperature: -20°C~60°C

**Operation Mode**

- Access Point / Access Point Router / Client Router / WDS / Client Bridge / Bridge:
  - 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
  - Multiple SSIDs support
  - Support 8 SSIDs
- 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 | 29.0 | -95.0 |
| | 2 Mbps | 29.0 | -93.0 |
| | 5.5 Mbps | 29.0 | -91.0 |
| | 11 Mbps | 29.0 | -89.0 |
| 802.11g 2.4 GHz | 6 Mbps | 28.0 | -90.0 |
| | 54 Mbps | 23.0 | -75.0 |
| 802.11n HT20 2.4 GHz | MCS 0 / 8 / 16 | 29.0 | -90.0 |
| | MCS 7 / 15 / 23 | 23.0 | -75.0 |
| 802.11n HT40 2.4 GHz | MCS 0 / 8 / 16 | 27.0 | -90.0 |
| | MCS 7 / 15 / 23 | 24.0 | -72.0 |

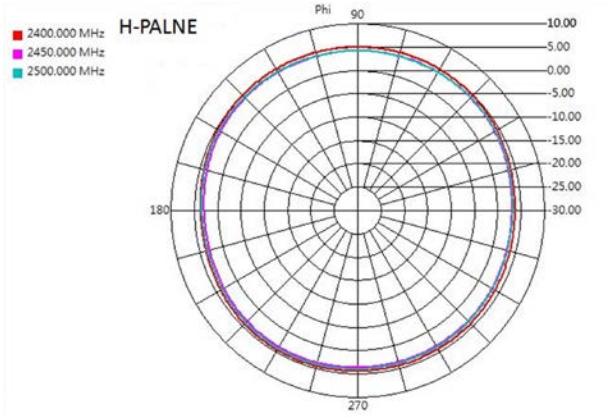
*Maximum performance of the hardware provided. Maximum transmit power is limited by local regulatory.
*The supported frequency band is restricted by local regulatory requirements.
*Transmit power is configured in 1.0dBm increments.
*The Max. Power may be different depending on local regulations

## Antenna Specifications (External Antenna)

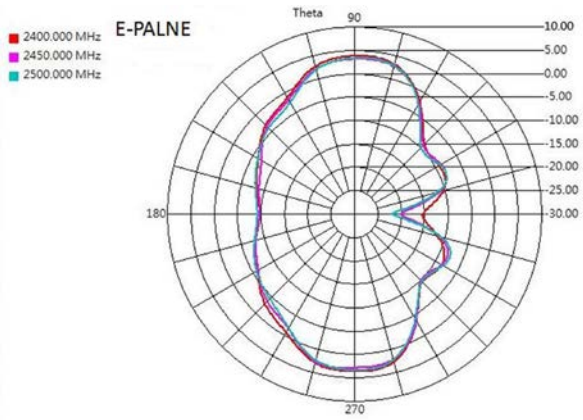
| External Antenna | 2.4GHz | 5GHz |
|---|---|---|
| Average Antenna Gain | 5.0dBi | - |
| Polariztion | Vertical | - |
| Azimuth Beam-Width | 360° | - |
| Elevation Beam-Width | 30° | - |
| VSWR | 1:2.0 | - |
| Dimension | 13(Φ)x200(L) mm | - |

## Radiation Diagram

**2.4GHz Azimuth -Plane**




**2.4GHz Elevation -Plane**

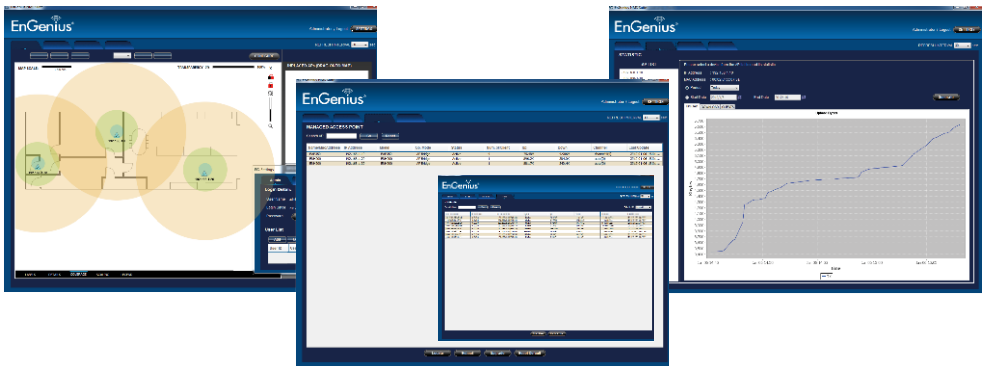


EZ CONTROLLER

# 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