



### Key Features

- IEEE 802.11ac and IEEE 802.11 a/b/g/n compliant
  - Dual Concurrent Architecture
  - Up to 300Mbps (2.4GHz) + 867Mbps (5GHz) wireless data transmission rate
  - AP/CB/WDS Operation Mode Support
  - Configure by Web UI or EZ controller
  - 8 SSIDs per Radio with VLAN Tagged
  - SNMP v1/v2c/v3 and MIB I/II supported
  - WEP/WPA/WPA2 Wireless Encryption
  - Support IPv4/IPv6
- Effective and flexible bandwidth management  
Band steering, guest network, client limit, fast roaming, and client status support
- Seamless Stream Service (Fast Roaming)
  - Manage and monitor by the AP, SSID

### 802.11ac/a/b/g/n Dual Radio Concurrent AP/CB/WDS

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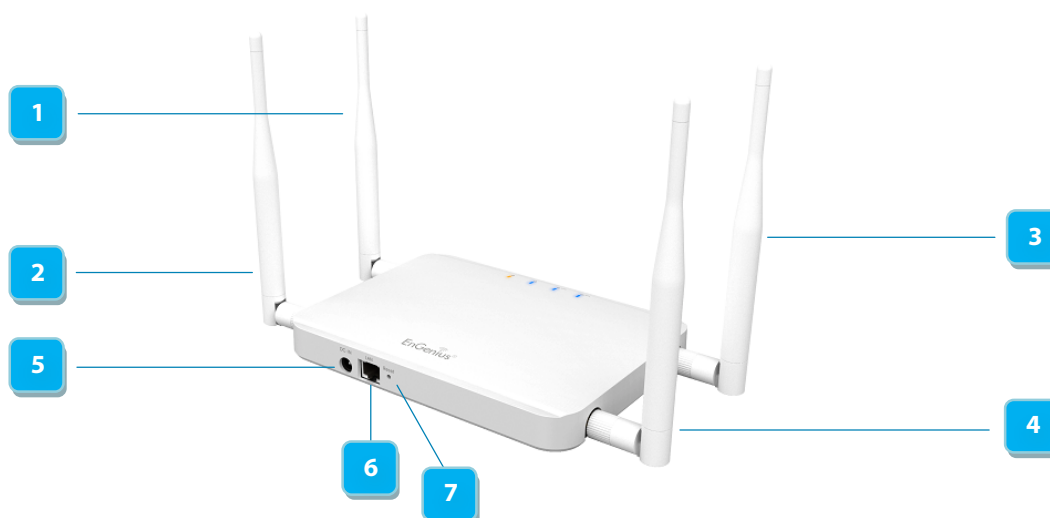
EnGenius Indoor Access Points/Client Bridge is Dual Band, Long Range, High Power, High Sensitivity and Strong Reliability for Enterprise solutions.

As the wireless is quickly evolving to play an imperative role to build networking infrastructure in the business and daily life settings, ECB1200 is engineered with dual-band concurrent architecture which offers the bandwidth up to 867Mbps on 5GHz band and 300Mbps on 2.4GHz band. With media-optimized performance, you can enjoy surfing internet seamless.

### Enterprise high-end Solutions

In order to fulfill the overwhelming internet application demands on a variety of application, ECB1200 is engineered to provide high power, high sensitivity throughput as well as equipped high gain antennas to achieve the greater coverage and long range transmission. The state-of-the-art shape and classical white will enhance aesthetic feeling in the office and indoor space no matter placing on the desk or hanging up it. Therefore, the robust mechanism and Power over Ethernet (PoE) enhances the ECB1200 can install on the wall easily and be powered by Ethernet cable which is compliant with **IEEE 802.3at standard**.

## Physical Interface



SMA-Type Connectors		Physical Interface	
1	2	5	DC 12V/ 2A Input
3	4	6	10/100/1000 Gigabit Ethernet port
		7	Reset Button

## Specification

### Wireless Radio Specification

- Dual Radio, 5GHz 802.11ac/a/n and 2.4GHz 802.11b/g/n
  - 2.4GHz: Max 300Mbps
  - 5GHz: Max 867Mbps
  - Dual concurrent radio support
- Transmit Power (combined):
  - 2.4GHz: max 15dBm
  - 5GHz: max 15dBm
  - Maximum power is limited by regulatory power
- Supported radio technologies:
  - 802.11b: Direct-sequence spread-spectrum(DSSS)
  - 802.11a/g/n/ac: 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/b/g with 20 MHz channel width
- Supported modulation types:

### Operation Mode

- Access Point / Client Bridge / WDS:

### Easy to Management

- Auto Channel Selection
  - Setting varies by Regulatory Domains
- SSIDs:
  - BSSID support
  - 16 SSIDs support
  - Support 8 SSIDs on both 2.4GHz and 5GHz bands
- 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

- 802.11b: BPSK, QPSK, CCK
- 802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
- 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
- Supported data rates (Mbps):
  - 802.11b: 1, 2, 5.5, 11
  - 802.11a/g: 6, 9, 12, 18, 36, 48, 54
  - 802.11n: 6.5 to 450 (MCS0 to MCS15)
  - 802.11ac: 6.5 to 1,300 (MCS0 to MCS9, NSS=1 to 3)

#### Power

- Power Source:
  - DC12V/2A
  - Active Ethernet, Power over Ethernet - 802.3at standard

#### Antennas

- 4 Detachable High Gain Antennas
  - 2 detachable 5dBi 2.4GHz antennas
  - 2 detachable 5dBi 5GHz antennas
- Omni-Directional Type
  - Provide the optimal coverage
- Compliant with SMA-type connector

#### Interface

- 10/100/1000 BASE-T Ethernet Ports:
  - Compliant with 802.3at PoE input

#### Mechanical & Environment

- Dimensions / Weight
  - 189mm (L) x 140mm (W) x 26mm (H)
  - 406 g (Unit, without mounting kit and antennas)
  -
- Operating:
  - Temperature: 0°C~50°C
  - Humidity: 0%~90% typical
- Storage:
  - Temperature: -20°C~60°C

#### Specification

#### Effective Control and Use

- Fast Roaming
  - Fast roaming facilitates secure mobility by reducing hand-off delay during transitions between the APs without service interruption.
- Fast handover
  - Fast handover allows device user to roam between the APs and under same SSID and encryption type without interruption.

#### Reinforcement Security

- WEP Encryption-64/128 bit
- WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES)
- Hide SSID in beacons

- 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
- Guest Network
  - Allows users to manage easily grant "visitor" access within the network.
- E-mail Alert:
  - Provides a network monitoring tool for administrators to stay informed the configuration change and network errors.
- QoS
  - Supports 802.11e/WMM/Traffic Shaping
- RADIUS Accounting:
  - Help operators to offload 3G to the wi-fi seamlessly

#### Effective Control and Use

- EnGenius Zone Controller (EZ Controller) Support
- CLI Comments Support
  - Setting varies by regulatory domains
- Supported radio technologies:
  - Multicast Supported
  - Wi-fi Scheduler
    - Set the schedule for rebooting the device
  - Band Steering
    - Shift the clients from 2.4GHz band to 5GHz band when the clients contest in 2.4GHz band

- MAC address filtering
  - Filter up to 50 MACs
- Wireless STA (Client) connection list:
  - Reports the various main information timely which is required by administrator
- Hhttps:
  - 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.

## RF Specification (Aggregated Value)

Channel	Data Rate	Transmit Power (Combined, dBm)	Receive Sensitivity (Combined, dBm)
802.11b 2.4 GHz	1 Mbps	15.0	-92.0
	2 Mbps	15.0	-91.0
	5.5 Mbps	15.0	-91.0
	11 Mbps	15.0	-89.0
802.11g 2.4 GHz	6 Mbps	15.0	-88.0
	54 Mbps	13.0	-72.0
802.11a 5 GHz	6 Mbps	15.0	-90.0
	54 Mbps	13.0	-72.0
802.11n HT20 2.4 GHz	MCS 0 / 8	15.0	-88.0
	MCS 7 / 15	13.0	-69.0
802.11n HT40 2.4 GHz	MCS 0 / 8	13.0	-84.0
	MCS 7 / 15	12.0	-68.0
802.11n HT20 5GHz	MCS 0 / 8	15.0	-89.0
	MCS 7 / 15	12.0	-70.0
802.11n HT40 5GHz	MCS 0 / 8	15.0	-85.0
	MCS 7 / 15	12.0	-68.0
802.11ac VHT20 5GHz	MCS0	15.0	-88.0
	MCS8	14.0	-65.0
802.11ac VHT40 5GHz	MCS0	14.0	-85.0
	MCS9	13.0	-61.0
802.11ac VHT80 5GHz	MCS0	12.0	-82.0
	MCS9	14.0	-58.0

\*Maximum transmit power is limited by local regulation.

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

\*Transmit power is configurable in 1.0dB increments.

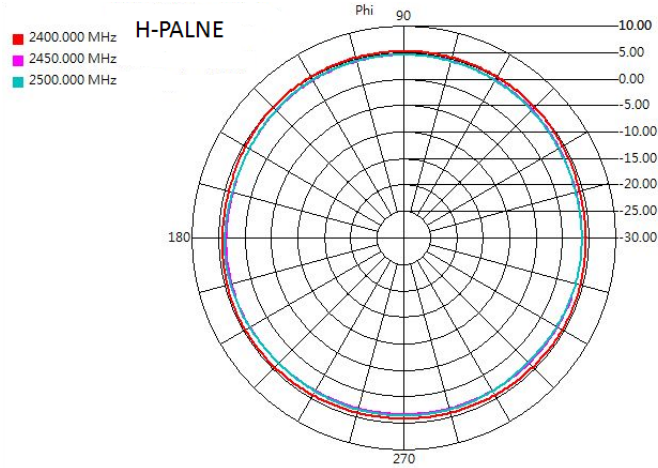


## Antenna Specificaitons (External Antenna)

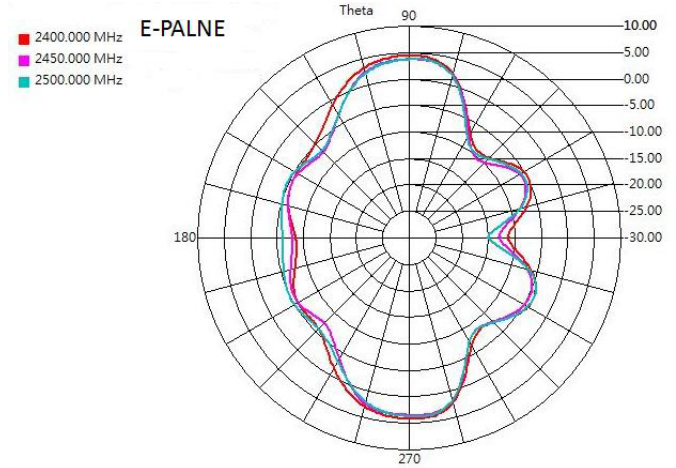
External Antenna	2.4GHz	5GHz
Average Antenna Gain	5.0dBi	5.0dBi
Polariztion	Vertical	Vertical
Azimuth Beam-Width	360°	360°
Elevation Beam-Width	30°	30°
VSWR	1:2.0	1:2.0
Dimension	13(Φ)x199(L) mm	

## Diagram Pattern

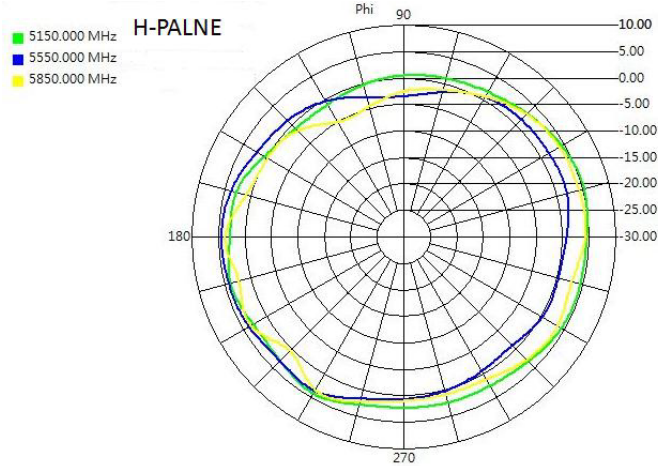
### 2.4GHz-H Plane



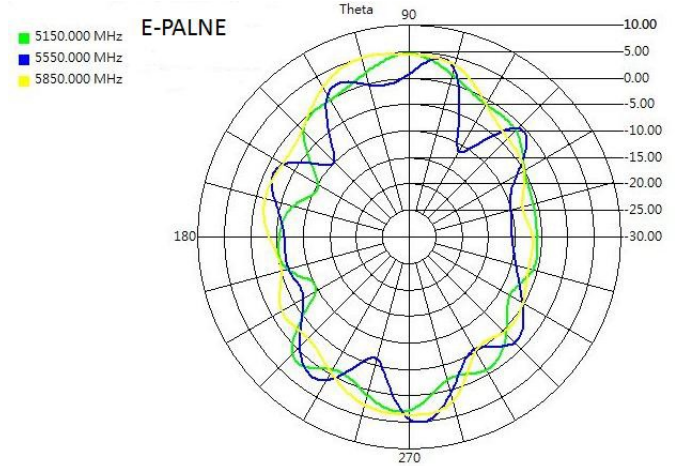
### 2.4GHz-E Plane



### 5GHz-H Plane



### 5GHz-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 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