

Key Features

- IEEE 802.11 ac and a/b/g/n compliant
- Dual Concurrent Architecture
- Bandwidth up to 450Mbps + 1300Mbps
- 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
- Intelligent Connection (Band Steering)
- Seamless Stream Service (Fast Roaming)
- Manage and monitor by the AP, SSID

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

EnGenius Indoor Access Points/Client Bridge/WDS 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, ECB1750 is engineered with dual-band concurrent architecture which offers the bandwidth up to 1300Mbps on 5GHz band and 450Mbps on 2.4GHz band. With media-optimized performance, you can enjoy surfing internet seamless.

Enterprise high-end Solutions

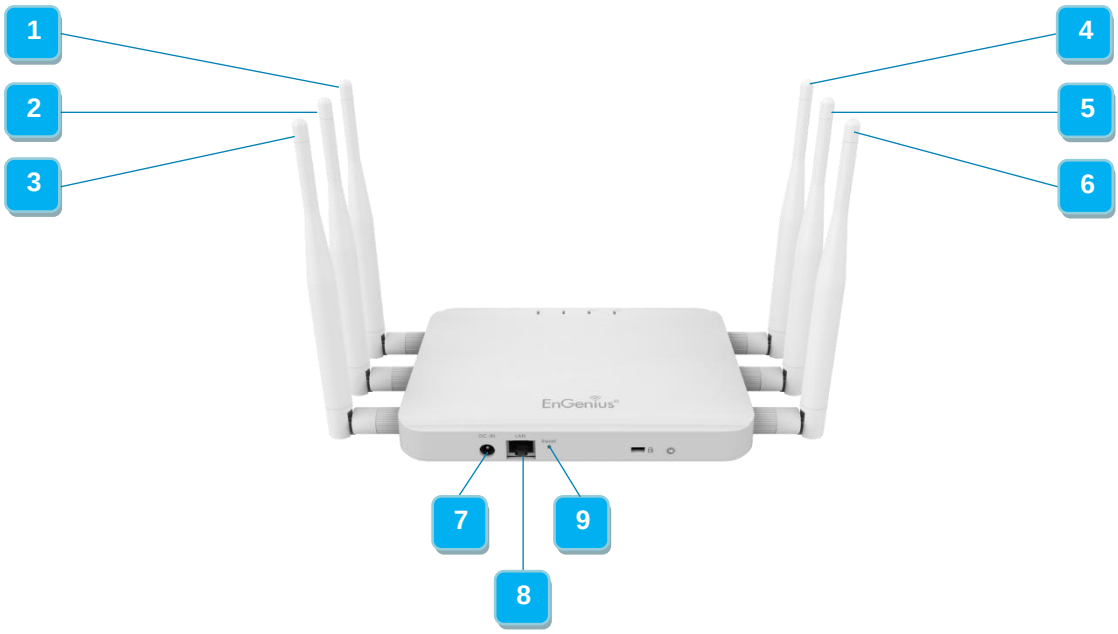
In order to fulfill the overwhelming internet application demands on a variety of application, ECB1750 is engineered to provide high power, high sensitivity throughput as well as equipped high gain antennas to achieve the greater coverage and long range transmission. The state-of-the-art shape and classical 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 ECB1750 can install on the wall easily and be powered by Ethernet cable which is compliant with **IEEE 802.3at standard**.

Effective Management

ECB1750 can be configured by web configuration or EnGenius Zone Controller (EZ controller) software. Furthermore, 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.

According to the users' needs, EnGenius has developed the multiple functions for maximum security, monitoring and easily management to ensure the optimal users' experience. ECB1750 provides wide-range of authentication and encryption standards (including WEP, WPA, WPA2, TKIP/AES and IEEE 802.1X) to enforce the maximum security. To provide steady and high transmitting data rate, EnGenius configured the band steering, clients limit and clients status for the administrator to monitor and manage the wireless service. If clients' device were configured 2.4GHz band and 5GHz band, ECB1750 will initialize the band steering and shift clients' device to connect the wireless from 2.4GHz to 5GHz as well as reduce the contention on 2.4GHz band. On the other hand, users can monitor the clients' status on using the resource to assure the internet resource is allocated optimally, to set up the quantity of connecting clients and to restrict the clients to access the ECB1750.

Physical Interface



SMA-Type Connectors				Physical Interface	
1	3	5	Detachable 5dBi 2.4GHz Omni-directional Antennas	7	DC 12V/2A Input
2	4	6	Detachable 5dBi 5GHz Omni-directional Antennas	8	10/100/1000 Gigabit Ethernet port
				9	Reset Button

Specification

Wireless Radio Specification

- Dual Radio, 5GHz 802.11ac/a/n and 2.4GHz 802.11b/g/n
  - 2.4GHz: Max 450Mbps
  - 5GHz: Max 1300Mbps
  - Dual concurrent radio support
- Transmit Power (Maximum Value)
  - 2.4GHz: Max 28dBm
  - 5GHz: Max 28dBm
  - 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: 3x3 MIMO with 3 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:
  - 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 MCS23)
  - 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

- Six Detachable High Gain Omni-Antennas
  - Three detachable 5dBi 2.4GHz antennas
  - Three detachable 5dBi 5GHz antennas
- Compliant with SMA-type connector

Interface

- 10/100/1000 BASE-T Ethernet Port:
  - 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

Operation Mode

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

Wireless

- 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
  - v1/v2c/v3 support
  - MIB I/II, Private MIB
- 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.
- QoS
  - Complaint with IEEE 802.11e standard
  - Traffic Shaping per SSID/per user
- RADIUS Accounting:
  - Help operators to offload 3G to the wi-fi seamlessly
- Band Steering
  - Shift the clients from 2.4GHz band to 5GHz band when the clients contest in 2.4GHz band
- 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.

Easy to Management

- EnGenius Zone Controller (EZ Controller) Support
- Save Configuration as Default:
  - Saves the customized configuration as default value for different customer demands.
- E-mail Alert:
  - Provides a network monitoring tool for administrators to stay informed the configuration change and network errors.
- CLI Comments Support

- Supported radio technologies
- Multicast Supported
- Realtime CPU load, traffic and network connection
- Wi-fi Scheduler
  - Set the schedule for rebooting the device
  - Setting varies by regulatory domains

Reinforcement Security

- WEP Encryption-64/128 bit
- WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES)
- Hide SSID in beacons
- MAC address filtering
  - Filter up to 32 MACs 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.

RF Specification (Aggregated Value)

Channel	Data Rate	Transmit Power (Aggregated, dBm)	Receive Sensitivity (Aggregated, dBm)
802.11b 2.4 GHz	1 Mbps	28.0	-96.0
	2 Mbps	28.0	-95.0
	5.5 Mbps	28.0	-95.0
	11 Mbps	28.0	-93.0
802.11g 2.4 GHz	6 Mbps	28.0	-92.0
	54 Mbps	25.0	-76.0
802.11a 5 GHz	6 Mbps	28.0	-93.0
	54 Mbps	24.0	-76.0
802.11n HT20 2.4 GHz	MCS 0 / 8 / 16	28.0	-91.0
	MCS 7 / 15 / 23	24.0	-72.0
802.11n HT40 2.4 GHz	MCS 0 / 8 / 16	28.0	-87.0
	MCS 7 / 15 / 23	24.0	-71.0
802.11n HT20 5GHz	MCS 0 / 8 / 16	27.0	-92.0
	MCS 7 / 15 / 23	24.0	-73.0
802.11n HT40 5GHz	MCS 0 / 8 / 16	27.0	-89.0
	MCS 7 / 15 / 23	24.0	-72.0
802.11ac VHT20 5GHz	MCS0_1SS / 2SS/ 3SS	27.0	-92.0
	MCS8_1SS / 2SS/ 3SS	22.0	-69.0
802.11ac VHT40 5GHz	MCS0_1SS / 2SS/ 3SS	27.0	-89.0
	MCS9_1SS / 2SS/ 3SS	20.0	-65.0
802.11ac VHT80 5GHz	MCS0_1SS / 2SS/ 3SS	27.0	-86.0
	MCS9_1SS / 2SS/ 3SS	20.0	-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.

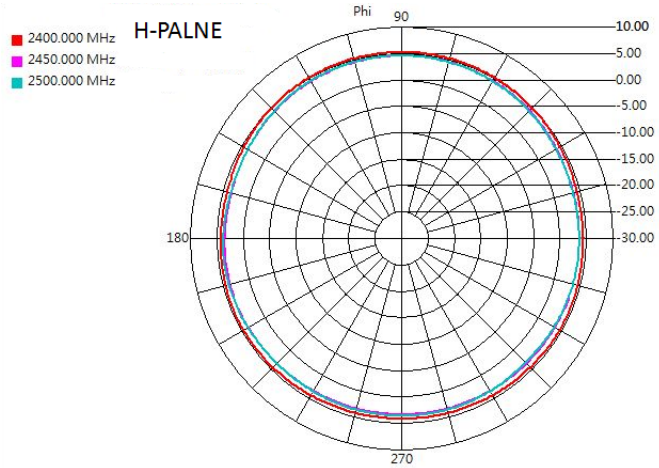
*The Max. Power may be different depending on local regulations

Antenna Specificaitons (External Antenna)

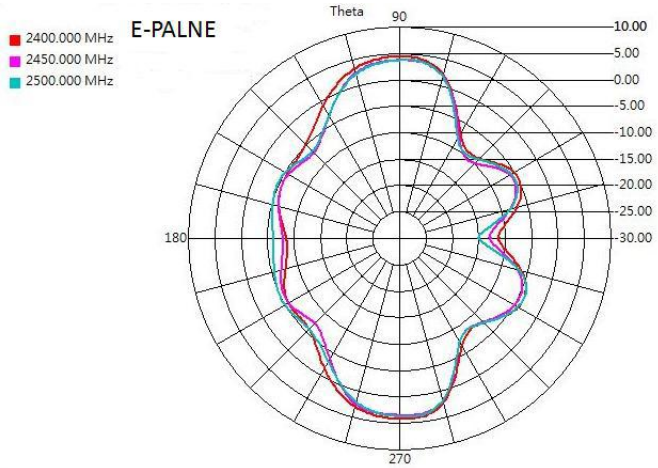
External Antenna	2.4GHz	5GHz
Average Antenna Gain	5.0dBi	5.0dBi
Polariztion	Vertical	Vertical
Azimuth Beam-Width	360°	360°
Elevation Beam-Width	30°	30°
VSWR	1:2.0	1:2.0
Dimension	13(Φ)x199(L) mm	

Diagram Pattern

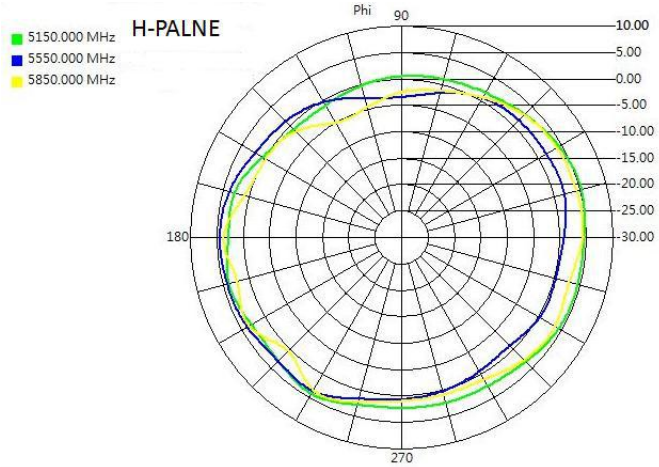
2.4GHz-H Plane



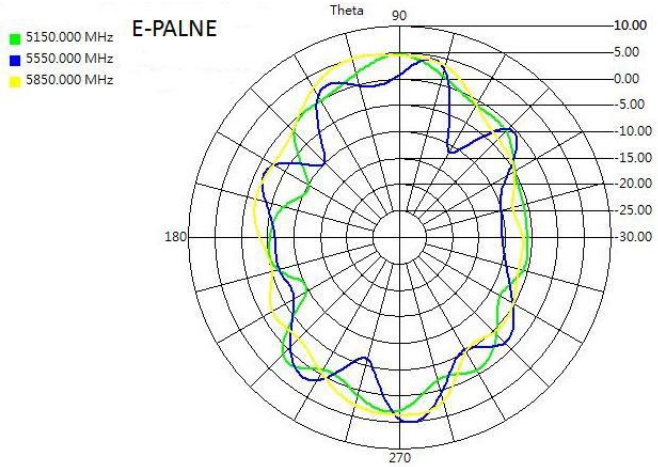
2.4GHz-E Plane



5GHz-H Plane



5GHz-E Plane



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

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

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range can vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment, and mix of devices in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners
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