

ECW Series Access Points



EnGenius Cloud Access Points Series

Optimal Performance, Enterprise Features, & Cloud Management

The EnGenius Cloud Access Point Series brings the industry's most advanced features for quick deployment and holistic management. EnGenius provides cloud managed access points for indoor and outdoor deployments. This Al-driven cloud solution is designed to increase wireless networking efficiency and reduce operating costs for small and medium-sized businesses, and empowers IT managers to rapidly implement IT initiatives to achieve their organizational objectives.

Easy Deployment — Cloud-managed access points for indoors consist of an indoor wall plate and ceiling-mount, while outdoor models are built to withstand difficult outdoor environments. Both indoor and outdoor models are highly flexible to meet the needs of distributed networks across multiple sites and scalable with company growth.

Smart Management — EnGenius Cloud's predictive artificial intelligence and access point data collection helps administrators improve network performance and prevent potential issues. The cloud-based solution allows you to manage the firmware and update network policy remotely for distributed clusters of access points based on region, time zone, and other configuration.

Visualized Analytics — With Al-driven cloud computing, the complex data generated by your networks is aggregated into a centralized, easy-to-navigate visual interface with comprehensive statistical tools and management controls. Minimize potential issues by setting up event-based alerts and receive push notifications through the EnGenius Cloud app.

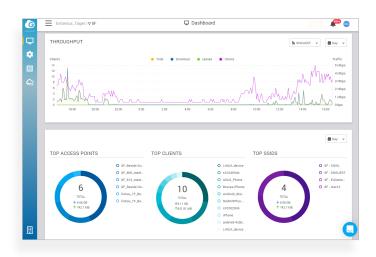
Features & Benefits

- Support standards up to 802.11ax(Wi-Fi 6E) and backward-com patible with 11ac/a/b/g/n
- Supercharged speeds up to 4,800 Mbps on 6 GHz, 2,400 Mbps on 5 GHz, and 1,200 Mbps on 2.4 GHz
- Tri-radio MU-MIMO improves performance and expands capacities (Wi-Fi 6E device)
- Versatile 4x4 and 2x2 11ax & 11ac Wave 2 models with internal & detachable antennas
- Flexible operation modes: AP, Mesh, and AP Mesh
- WPA3 & WPA2-AES authentication support
- Quick-scan device register & configuration and remote monitoring & troubleshooting
- Cloud manages an unlimited number of APs from anywhere with the EnGenius Cloud App
- Mesh wireless support simplifies setup, optimizes signals, and enables self-heals
- WIDS/WIPS, spectrum analysis, and BLE support of Security Access Points

Benefits to Help Grow Your Business

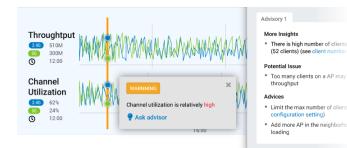
Overview of Access Points Status

The EnGenius Cloud dashboard provides a big-picture view of your network status. The dashboard captures the health status of access points, collects analytics data including network connection status and real-time traffic, and highlights the most used access points, SSID's, clients and applications.



Pinpoint Issues with the AI-Driven Advisory Board

The EnGenius Cloud advisory board uses artificial intelligence to continuously analyze your networks and report potential problems. You can customize notifications to be sent for any identified abnormal situation in your network devices, which will include recommended best responses to common issues derived from EnGenius machine learning and research.



User Authentication for Wi-Fi Access Per SSID

EnGenius Cloud provides a range of authentication methods to cater to diverse business needs. The AAA authentication can be configured either on the cloud or via the Customer's RADIUS server. Additionally, you can set up a Guest Wi-Fi service with voucher functionality, or enable users to sign in by connecting to their social media account.

Monitor and Troubleshoot with the Client Timeline

The client timeline pulls up an entire device's history to allow for tracing of potential problems at their source. It provides additional information about issues by analyzing the authentication process between devices, such as a smartphone and wireless access points. The unfolded timeline also assists you to realize if the network problems are related to weak signals or incorrect password between clients and access points.



Network Management and Monitoring On the Go

With the EnGenius Cloud To-Go mobile app, you can have full control of cloud managed access points and devices. It offers highly customizable and real-time notifications to help you stay alert to all issues when they first arise. By using the EnGenius Cloud To-Go app, businesses can easily create a network and configure access points from any location.

Customize Splash Page with Ease

Empower your IT personnel to customize the splash page as you see fit with pre-made templates with WYSIWYG editor. This gives you a starting point to customize logos, images, or add your own HTML so you can give your customers the entrance page that you want them to see before accessing the network.



Quick Access to Access Point insights

EnGenius Cloud manages all devices in from a single centralized interface. The access points list offers you a summary of the most important current traffic usage data, such as radio configurations and IP settings. In addition to configuration changes, the list view allows administrators to drill down into details of specific access points to check overall configurations, real-time system meters, radio configuration and IP settings for initial setup, monitoring and troubleshooting.



Supervise Access Points with Real-Time Metrics

EnGenius Cloud management can break down an access point's key performance diagnostics such as CPU, memory utilization, and throughput to determine the root cause of a current network problem.

		Model Name	ECW120	IP Address	192.168.1.150	2.40	Auto (Ch	CPU
		Firmware	v 1.0.5	Subnet Mask	255.255.254.0	60	Auto (Ch	
		Serial No.	sn123456789	Gateway	192.168.1.1			MANNA MA
-	_	MAC Address	0A:18:2C:3D:4P.FE	Topology	Show	LED		45%
ummary	Logs	Tools	Clients				_	
	Logo	10013	Gilents				-	
SSID Info		10013	Gilents				1	~M/.M.A.A.M.
SSID Info	rmation	Radio	Security	Сар	tive Portal	Client is	n 5 mins	71% Throughput 240/bpt
	rmation			Capi		Client in 10/15	n 5 mins	71% Throughput 280/199 230 + MAA MA
# SSID	rmation	Radio	Security		ne		n 5 mins	71% Throughput 240/bpt
# SSID 1 SSID_	rmation	Radio 240 50	Security WPA2 PSK	Nor	ne	10/15	n 5 mins	71% Throughput 280/199 230 + MAA MA

SmartCasting for Mobile Media Streaming to TV

The SmartCasting feature supports fast setup and mobile streaming to the TV. The media sticks, game consoles, or other devices connected to the guest networks bring an exceptional, personalized entertainment experience by casting on the big screen.



Access Points Locations and Wi-Fi Strength with Floor Plan

The included Wi-Fi site survey tool accepts an upload of your floor plan and simulates Wi-Fi coverage with a heat map of your desired Tx power, RSSI value, and channel. It is capable of factoring in physical obstacles and other impediments to coverage in its forecast.



Block Suspicious Clients from Your Networks

The rogue client monitoring tools allow you to deny access to your SSID for selected clients.



Give Devices VIP Permission to Join Networks Bypass Captive Portal

You can skip authentication for specific clients such as barcode scanners or printers with no web-based interface to proceed.for selected clients.



Security Access Points Features

AirGuard WIDS Detects Different Types of Wireless Threats

AirGuard is an intelligent wireless security system built-in EnGenius Cloud security AP to protect the airspace from rogue devices and wireless threats 24/7. Using dedicated scanning radios, AirGuard security APs continuously scan the environment for rogue APs and other threats based without degrading network speed at all.

AirGuard auto-categorizes those detected wireless threats.

- · Rogue Access Point
- Man-in-the-middle
- Valid SSID Misuse
- Evil Twin Attack
- RF Jamming
- De-authentication

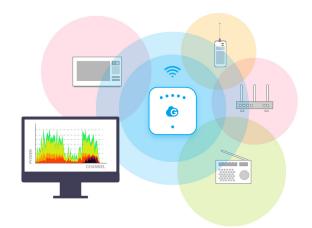


AirGuard WIPS Completely Protect the Airspace from Wireless Attacks

Once a threat has been detected in the network, the AirGuard system will send alert notifications to the administrator whenever security issues are found and provide corresponding advice for remediations.

Real-time Diagnostics to Ensure Air Quality

The security AP comes with the diagnostics toolset to monitor the environment's real-time radio interference, channel utilization, and device status. Thus, the administration can quickly find the potential issues and adjust the device settings accordingly for better experience and performance.



Zero-wait DFS to Avoid Disrupting Client Connection

EnGenius zero-wait DFS feature provides a mechanism for the security AP to avoid connection disruption from radar detection and provides an uninterrupted change of DFS channels when needed.

BLE Capability for Location-based Services and IoT Applications

The security AP can scan and obtain information from Bluetooth devices nearby with a built-in BLE sensor. We also provide BLE API for vendors to communicate with and get data from security AP for any IOT or location-based applications.

Wi-Fi 6E Access Points Solution

Wi-Fi 6E demonstrates the Ultimate Performance with 6 GHzenabled

Wi-Fi 6E Extends Wi-Fi 6 the features into the 6 GHz band for groundbreaking performance across mobile, computer, and network infrastructure. The newly allocated 6 GHz band doubles the available spectrum and is designed to transform industries through a boost in speed, surge in capacity, and dramatic reduction in latency.

EnGenius Wi-Fi 6E AP brings the Perfect Experience of Futureproof Application

The seven 160 MHz high bandwidth channels and additional 1.2 GHz available spectrum of EnGenius Wi-Fi 6E Access Points satisfies the application requirements of high throughput and multi-gigabit connection.

- 4K/8K high-resolution streaming.
- · Cloud computing and collaborative work.
- Next generation experience of AR, VR, and Metaverse.
- · High-density wireless network environment

				Indoor		
			٢			
Model Name	Cloud5 2x2 Wall- plate	Cloud6 2x2 Wall- plate	Cloud5 2x2	Cloud5 4x4	Cloud6 2x2	Cloud6 2x2 S
Model Number	ECW115	ECW215	ECW120	ECW130	ECW220	ECW220S
Wi-Fi Standard	11ac Wave 2	Wi-Fi 6 (11ax)	11ac Wave 2	Wi-Fi 5	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)
Frequency	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz
Data Rate (2.4 GHz)	400 Mbps	600 Mbps	400 Mbps	800 Mbps	600 Mbps	600 Mbps
Data Rate (5 GHz)	867 Mbps	1200 Mbps	867 Mbps	1800 Mbps	1200 Mbps	1200 Mbps
Data Rate (6 GHz)	-	-	-	-	-	-
Radio Chains	2 × 2:2	2 × 2:2	2 × 2:2	4 × 4:4	2 × 2:2	2 × 2:2
Tx Power (2.4 GHz)	17 dBm	20 dBm	23 dBm	25 dBm	22 dBm	22 dBm
Tx Power (5 GHz)	17 dBm	20 dBm	23 dBm	24 dBm	22 dBm	22 dBm
Tx Power (6 GHz)	-	-	-	-	-	-
Antennas (2.4 GHz)	2 x 4 dBi Omni	2 x 4 dBi Omni	2 x 5 dBi Omni	4 x 4 dBi Omni	2 x 4 dBi Omni	2 x 4 dBi Omni
Antennas (5 GHz)	2 x 5 dBi Omni	2 x 5 dBi Omni	2 x 5 dBi Omni	4 x 6 dBi Omni	2 x 5 dBi Omni	2 x 5 dBi Omni
Antennas (6 GHz)	-	-	-	-	-	-
PoE Standard	802.3af/at	802.3af/at	802.3af	802.3at	802.3af/at	802.3af/at
Scanning Radio	-	-	-	-	-	•
BLE	-	-	-	-	-	•
Power Consump- tion (Peak)	11.9W	14.2W	12W	19.1W	12.8W	12.8W
Ethernet Port	2x Gigabit ports (PoE+) 1x Gigabit port (PSE Out)	2x Gigabit ports (PoE+) 1x Gigabit port (PSE Out)	1x Gigabit port (PoE)	1x Gigabit port (PoE at) 1x Gigabit port	1x Gigabit port (PoE+)	1x Gigabit port (PoE+)
Mounting	Wall	Wall	Wall/ Ceilling	Wall/ Ceilling	Wall/ Ceilling	Wall/ Ceilling
IP Rating	N/A	N/A	N/A	N/A	N/A	N/A
Dimensions	140 x 90 x 40 mm	140 x 90 x 40 mm	161 x 161 x 41 mm	215 x 215 x 56 mm	160 x 160 x 33 mm	160 x 160 x 33 mm
Mesh Technology	٠	•	•	•	•	•
Mobile app (Cloud To-Go)	•	•	٠	•	۲	٠

 \star The data is for ECW220 hardware v2 only. For hardware v1, the Tx-power is 20 dBm.

	Indoor		Outdoor			
		1 1334	k k	H H		
G	Constant and the second	(Constraint)	Conte	C.	Contract of the second	
			181		1-1-1	

Model Name	Cloud6 4x4	Cloud6 4x4 S	Cloud6E 4x4x4	Cloud5 2x2 Outdoor	Cloud6 2x2 Outdoor	Cloud6 4x4 Outdoor
Model Number	ECW230	ECW230S	ECW336	ECW160	ECW260	ECW270
Wi-Fi Standard	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)	Wi-Fi 6E (11ax)	11ac Wave 2	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)
Frequency	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz & 6 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5GHz	2.4 GHz & 5GHz
Data Rate (2.4 GHz)	1200 Mbps	1200 Mbps	1,200 Mbps	400 Mbps	600 Mbps	1200 Mbps
Data Rate (5 GHz)	2400 Mbps	2400 Mbps	2,400 Mbps	867 Mbps	1200 Mbps	2400 Mbps
Data Rate (6 GHz)	-	-	4,800 Mbps	-	-	-
Radio Chains	4 × 4:4	4 × 4:4	4 × 4:4	2 × 2:2	2 × 2:2	4 x 4:4
Tx Power (2.4 GHz)	23 dBm	23 dBm	23 dBm	23 dBm	23 dBm	24 dBm
Tx Power (5 GHz)	23 dBm	23 dBm	23 dBm	23 dBm	25 dBm	24 dBm
Tx Power (6 GHz)	-	-	23 dBm	-	-	-
Antennas (2.4 GHz)	4 x 5 dBi Omni	4 x 5 dBi Omni	4 x 5 dBi Omni	2 x 5 dBi External Omni	2 x 5 dBi External Omni	4 x 5 dBi External Omni
Antennas (5 GHz)	4 x 6 dBi Omni	4 x 6 dBi Omni	4 x 6 dBi Omni	2 x 5 dBi External Omni	2 x 5 dBi External Omni	4 x 7 dBi External Omni
Antennas (6 GHz)	-	-	4 x 5 dBi Omni	-	-	-
PoE Standard	802.3at	802.3at	802.3at	802.3af/at	802.3af/at	802.3at/bt
Scanning Radio	-	٠	-	-	-	-
BLE	-	•	-	-	-	-
Power Consumption (Peak)	19.5W	19.5W	22.5W	12.6W	15.9W	46W
Ethernet Port	1x 2.5G port (PoE+)	1x 2.5G port (PoE+)	1x 5G port (PoE+)	1x Gigabit port (PoE+)	1x 2.5G port (PoE+)	1 x 2.5G port (PoE++), 1 x 1G port(PSE Out)
Mounting	Wall/ Ceilling	Wall/ Ceilling	Wall/ Ceiling	Wall/ Pole	Wall/ Pole	Wall/ Pole
IP Rating	N/A	N/A	N/A	IP67	IP67	IP68
Dimensions	205 x 205 x 33 mm	205 x 205 x 33 mm	205 x 205 x 33 mm	112 x 173 x 30 mm	124 x 190 x 52.5 mm	218 x 285 x 53 mm
Mesh Technology	•	•	•	•	•	•
Mobile app (Cloud To-Go)	٠	•	•	•	•	•

Standards	
ECW115/ECW120/ECW130/ECW160	
EEE 802.11b/g/n on 2.4 GHz EEE 802.11a/n/ac on 5 GHz	
ECE 002.114/1/20013.012 ECW215/ECW220/ECW230/ECW260/ECW220S/ECW230S/ECW270	
EEE 802.11ax on 2.4 GHz	
EEE 802.11ax on 5 GHz	
Backward compatible with 802.11a/b/g/n/ac	
ECW336	
EEE 802.11ax on 2.4 GHz	
EEE 802.11ax on 5 GHz	
EEE 802.11ax on 6 GHz	
Backward compatible with 802.11a/b/g/n/ac	
Antenna	
ECW115/ECW215	
2 x 5 GHz: 5 dBi	
ntegrated Omni-Directional Antenna	
2 x 2.4 GHz: 5 dBi	
2 x 5 GHz; 5 dBi	
ntegrated Omni-Directional Antenna	
ECW130	
4 x 2.4 GHz: 4 dBi	
4 x 5 GHz: 6 dBi	
ntegrated Omni-Directional Antenna	
ECW160/ECW260	
2 x 2.4 GHz: 5 dBi	
2 x 5 GHz: 5 dBi	
External Omni-Directional Antenna	
ECW220/ECW220S	
2 x 2.4 GHz: 4 dBi	
2 x 5 GHz: 5 dBi	
ntegrated Omni-Directional Antenna	
ECW230/ECW230S	
4 x 2.4 GHz: 5 dBi	
4 x 5 GHz: 6 dBi	
ntegrated Omni-Directional Antenna	
ECW270	
4 x 2.4 GHz: 5 dBi	
4 x 5 GHz: 7 dBi	
External Omni-Directional Antenna	
ECW336	
4 x 2.4 GHz: 5 dBi	
4 x 5 GHz: 6 dBi	
4 x 6 GHz: 5 dBi	
ntegrated Omni-Directional Antenna	

ECW115	/ECW215
2 x 10/10	00/1000 Ethernet Ports (PoE+)
1 x 10/10	00/1000 Ethernet Port (PSE Out ; requires 802.3at power source)
1 x DC Ja	ack
1 x Reset	t Button
ECW120	
1 x 10/10	00/1000 Ethernet Port (PoE)
1 x DC Ja	ack
1 x Reset	t Button
ECW130	1
1 x 10/10	00/1000 Ethernet Port (PoE at)
1 x 10/10	00/1000 Ethernet Port
1 x DC Ja	ack
1 x Reset	t Button
ECW160	
1 x 10/10	00/1000 Ethernet Port (PoE+)
ECW220	/ECW220S
1 x 10/10	00/1000 Ethernet Port (PoE+)
1 x DC Ja	ack
1 x Reset	t Button
ECW230	/ECW230S
1 x 10/10	00/1000/2500 Ethernet Port (PoE+)
1 x DC Ja	ack
1 x Reset	t Button
ECW260	1
1 x 10/10	00/1000/2500 Ethernet Port (PoE+)
ECW270	
1 x 10/10	00/1000/2500 Ethernet Port (PoE++)
1 x 10/10	00/1000 Ethernet Port (PSE Out ; requires 802.3bt power source)
ECW336	
1 x 10/10	00/1000/2500/5000 Ethernet Port (PoE+)
1 x DC Ja	ack
1 x Reset	t Button
LED Indi	cators
	/ECW215
	-color LED
ECW120	
1 x Powe	
1 x LAN	
1 x 2.4 G	Hz
1 x 5 GH:	

ECS130/ECW270
1 x Power
1 x LAN1
1 x LAN2
1 x 2.4 GHz
1 x 5 GHz
ECW160/ECW220/ECW230/ECW260/ECW220S
1 x Power
1 x LAN
1 x 2.4 GHz
1 x 5 GHz
ECW230S
1 x Power
1 x LAN
1 x 2.4 GHz
1 x 5 GHz
1 x Scanning
1 x BLE
ECW336
1 x Power
1 x LAN
1 x 2.4 GHz
1 x 5 GHz
1 x 6 GHz
Power Source
ECW115
Power-over-Ethernet: 802.3af/at Input
12VDC /1A Power Adapter (Optional)
ECW120
Power-over-Ethernet: 802.3af Input
12VDC /1A Power Adapter (Optional)
ECW130/ECW230/ ECW230S/ ECW336
Power-over-Ethernet: 802.3at Input
12VDC /2A Power Adapter (Optional)
ECW215/ECW220/ ECW220S
Power-over-Ethernet: 802.3af/at Input
12VDC /1.5A Power Adapter (Optional)
ECW160/ ECW260
Power-over-Ethernet: 802.3af/at Input
Active Ethernet (PoE)
ECW270
Power-over-Ethernet: 802.3at/bt Input
Active Ethernet (PoE)

	n Power Consumption
ECW115	
11.9W	
ECW120	
12W	
ECW130	
19.1W	
ECW160	
12.6W	
ECW215	
14.2W	
	ECW220S
12.8W	501/0000
	ECW230S
19.5W	
ECW260	
ECW270	
46W	
ECW336	
ECW115/	& Radio Specifications Operating Frequency ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ S/ECW230S/ECW270
	io Concurrent 2.4 GHz & 5 GHz
ECW336	
	Concurrent 2.4 GHz & 5 GHz & 6GHz
Operation	n Modes
	ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ S/ECW230S/ECW270/ECW336
Managed	mode: AP, AP Mesh, Mesh
Frequenc	·
	ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW220S S/ECW336
2.4 GHz:	2400 MHz ~ 2482 MHz
	50 MHz ~ 5250 MHz, 5250 MHz ~ 5350 MHz, 5470 MHz ~ 5725 MH z ~ 5850 MHz
ECW260	ECW270
2.4 GHz:	2400 MHz ~ 2483 MHz
	50 MHz ~ 5250 MHz, 5250 MHz ~ 5350 MHz, 5470 MHz ~ 5725 MH

5 GHz: 5150 MHz \sim 5250 MHz, 5250 MHz \sim 5350 MHz, 5470 MHz \sim 5725 MHz, 5725 MHz \sim 5875 MHz

ECW336

6 GHz: 5925MHz ~ 6425MHz, 6525MHz ~ 6875MHz

ECW115	
Up to 17 dBr	m on 2.4 GHz
Up to 17 dBr	n on 5 GHz
(Maximum p	oower is limited by regulatory domain)
ECW120/EC	W160
Up to 23 dBr	m on 2.4 GHz
Up to 23 dBr	m on 5 GHz
(Maximum p	oower is limited by regulatory domain)
ECW130	
Up to 25 dBr	m on 2.4 GHz
Up to 24 dBr	m on 5 GHz
(Maximum p	oower is limited by regulatory domain)
ECW215	
Up to 20 dBr	m on 2.4 GHz
Up to 20 dBr	m on 5 GHz
(Maximum p	oower is limited by regulatory domain)
ECW220/EC	W220S
Up to 22 dBr	m on 2.4 GHz
Up to 22 dBr	n on 5 GHz
(Maximum p	oower is limited by regulatory domain)
ECW230/EC	W230S
Up to 23 dBr	m on 2.4 GHz
Up to 23 dBr	n on 5 GHz
(Maximum p	oower is limited by regulatory domain)
ECW260/EC	W270
Up to 23 dBr	m on 2.4 GHz
Up to 25 dBr	n on 5 GHz
(Maximum p	oower is limited by regulatory domain)
ECW336	
Up to 23 dBr	m on 2.4 GHz
Up to 23 dBr	m on 5 GHz
Up to 23 dBr	m on 6 GHz
(Maximum p	power is limited by regulatory domain)
Tx Beamfor	ming (TxBF)
	s/Spatial Stream
	o, opunal on our

ECW115/ECW120/ECW160/ECW215/ECW220/ECW260/ECW220S

2 × 2:2

ECW130/ECW230/ECW230S/ECW270/ECW336

 $4 \times 4:4$

SU-MIMO

ECW115/ECW120/ECW160

Two(2) spatial stream Single User (SU) MIMO for up to 400 Mbps wireless data rate with VHT40 bandwidth to a 2x2 wireless device under the 2.4GHz radio.

Two(2) spatial stream Single User (SU) MIMO for up to 867 Mbps wireless data rate with VHT80 to a 2x2 wireless device under the 5GHz radio.

ECW130

Four(4) spatial stream Single User (SU) MIMO for up to 800 Mbps wireless data rate with VHT40 bandwidth to a 4x4 wireless device under the 2.4GHz radio.

Four(4) spatial stream Single User (SU) MIMO for up to 1800 Mbps wireless data rate with VHT80 to a 4x4 wireless device under the 5GHz radio.

ECW215/ECW220/ECW220S

Two (2) spatial stream Single User (SU) MIMO for up to 574 Mbps wireless data rate with HE40 bandwidth to a 2x2 wireless client device under the 2.4GHz radio.

Two (2) spatial stream Single User (SU) MIMO for up to 1,200 Mbps wireless data rate with VHT80 to a 2x2 wireless device under the 5GHz radio.

ECW230/ECW230S/ECW270

Four (4) spatial stream Single User (SU) MIMO for up to 1148 Mbps wireless data rate with HE40 bandwidth to a 4x4 wireless client device under the 2.4GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 2400 Mbps wireless data rate with HE80 to a 4x4 wireless device under the 5GHz radio.

ECW260

Two(2) spatial streams SU-MIMO for 2.4GHz and two(2) spatial streams SU-MIMO for 5GHz up to totally 1,774Mbps wireless data rate to a single 11ax wireless client device under the both 2.4GHz and 5GHz radio.

ECW336

Four (4) spatial stream Single User (SU) MIMO for up to 1148 Mbps wireless data rate with HE40 bandwidth to a 4x4 wireless client device under the 2.4GHz radio.

Four (4) spatial stream Single User (SU) MIMO for up to 2400 Mbps wireless data rate with HE80 to a 4x4 wireless device under the 5GHz radio. Four (4) spatial stream Single User (SU) MIMO for up to 4800 Mbps wireless data rate with HE160 to a 4x4 wireless device under the 6GHz radio.

MU-MIMO

ECW115/ECW120/ECW160

Two (2) Spatial Stream MU-MIMO up to 867 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO capable wireless devices under 5GHz simultaneously.

ECW130

Four(4) spatial stream MU-MIMO for up to 800 Mbps wireless data rate with VHT40 bandwidth to a 4x4 wireless device under the 2.4GHz radio.

Four(4) spatial stream MU-MIMO for up to 1800 Mbps wireless data rate with VHT80 to a 4x4 wireless device under the 5GHz radio simultaneously.

ECW215/ECW220/ECW220S

Two (2) spatial streams Multiple (MU)-MIMO up to 1,200 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Two (2) spatial streams Multiple (MU)-MIMO up to 574 Mbps wireless data rate for transmitting to two (2) streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

ECW230/ECW230S/ECW270

Four (4) spatial streams Multiple (MU)-MIMO up to 2,400 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Four (4) spatial streams Multiple (MU)-MIMO up to 1,148 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

ECW260

Two(2) spatial streams multi-user (MU)-MIMO for up to 1201 Mbps wire-less data rate to transmit to one(1) two streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Two(2) spatial streams multi-user (MU)-MIMO for up to 574 Mbps wireless data rate to transmit to one(1) two streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

ECW336

Four (4) spatial streams Multiple (MU)-MIMO up to 4800 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 6GHz simultaneously.

Four (4) spatial streams Multiple (MU)-MIMO up to 2,400 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 5GHz simultaneously.

Four (4) spatial streams Multiple (MU)-MIMO up to 1,148 Mbps wireless data rate for transmitting to four (4) streams MU-MIMO 11ax capable wireless client devices under 2.4GHz simultaneously.

Supported Data Rates (Mbps):

ECW115/ECW120/ECW130/ECW160

2.4 GHz: Max 400 (MCS0 to MCS11, NSS = 1 to 2)

5 GHz: Max 867 (MCS0 to MSC11, NSS = 1 to 2)

802.11b: 1, 2, 5.5, 11

802.11a/g: 6, 9, 12, 18, 36, 48, 54

 $802.11n;\,6.5$ to 300 Mbps (MCS0 to MCS15) (Additional 25% bandwidth when enabling 256-QAM uner HT40)

802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)

ECW215/ECW220/ECW220S

802.11ax:

2.4 GHz: 9 to 574 (MCS0 to MCS11, NSS = 1 to 2)

5 GHz: 18 to 1200 (MCS0 to MSC11, NSS = 1 to 2)

802.11b: 1, 2, 5.5, 11

802.11a/g: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5 to 300 Mbps (MCS0 to MCS15)

802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)

ECW230/ECW260/ECW230S/ECW270

802.11ax:

2.4 GHz: 9 to 1,148 (MCS0 to MCS11, NSS = 1 to 4)

5 GHz: 18 to 2,400 (MCS0 to MSC11, NSS = 1 to 4)

```
802.11b: 1, 2, 5.5, 11
```

802.11a/g: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5 to 600 (MCS0 to MCS31)

802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4)

ECW336

802.11ax:

2.4 GHz: 9 to 1,148 (MCS0 to MCS11, NSS = 1 to 4)

5 GHz: 18 to 2,400 (MCS0 to MSC11, NSS = 1 to 4)

6 GHZ: 18 to 4,800 (MCS0 to MSC13, NSS = 1 to 4)

802.11b: 1, 2, 5.5, 11

802.11a/g: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5 to 600 (MCS0 to MCS31)

802.11ac: 6.5 to 1,733 (MCS0 to MCS9, NSS = 1 to 4)

Supported Radio Technologies

ECW115/ECW120/ECW160

802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM)

802.11b: Direct-Sequence Spread Spectrum (DSSS)

802.11n/ac: 2×2 MIMO with 2 Streams

ECW130

802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM)

802.11b: Direct-Sequence Spread Spectrum (DSSS)

802.11n/ac: 4x4 MIMO with 4 Streams

ECW215/ECW220/ECW230/ECW260/ECW220S/ECW230S/ECW270/ECW336

802.11ax: Orthogonal Frequency Division Multiple Access(OFDMA)

802.11a/g/n/ac: Orthogonal Frequency Division Multiple (OFDM)

802.11b: Direct-sequence spread-spectrum (DSSS)

Channelization

ECW115/ECW120/ECW130/ECW160

802.11ac Supports Very High Throughput (VHT)–VHT 20/40/80 MHz

802.11n Supports High Throughput (HT)-HT 20/40 MHz

802.11
n Supports High Throughput (HT) Under the 2.4 GHz Radio $-\rm HT$ 40 MHz (256-QAM)

802.11n/ac Packet Aggregation: A-MPDU, A-SPDU

ECW215/ECW220/ECW230/ECW260/ECW220S/ECW230S/ECW270

802.11ax supports high efficiency throughput (HE) -HE 20/40/80 MHz

802.11ac supports very high throughput (VHT) -VHT 20/40/80 MHz

802.11n supports high throughput (HT) –HT 20/40 MHz

802.11n supports high throughput under the 2.4GHz radio $-\mathrm{HT40}\;\mathrm{MHz}$ (256-QAM)

802.11n/ac/ax packet aggregation: A-MPDU, A-SPDU

ECW336

802.11ax supports high efficiency throughput (HE) -HE 20/40/80/160 MHz

802.11ac supports very high throughput (VHT) -VHT 20/40/80 MHz

802.11n supports high throughput (HT) -HT 20/40 MHz

802.11n supports high throughput under the 2.4GHz radio $-\mathrm{HT40}\;\mathrm{MHz}$ (256-QAM)

802.11n/ac/ax packet aggregation: A-MPDU, A-SPDU

Max Concurrent User

ECW115/ECW120/ECW130/ECW160/ECW215

127 Per radio

511 Per radio

ECW220/ECW230/ECW260/ECW220S/ECW230S/ECW270/ECW336

Supported Modulation

ECW115/ECW120/ECW130/ECW160

802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

802.11b: BPSK, QPSK, CCK

ECW215/ECW220/ECW230/ECW260/ECW220S/ECW230S/ECW270/ECW336

802.11ax: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM

802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

802.11b: BPSK, QPSK, CCK

Management Multiple BSSID

ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270

8 SSIDs on both 2.4GHz and 5GHz bands.

ECW336

8 SSIDs on both 2.4GHz, 5GHz & 6GHz bands

VLAN Tagging

ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270/ECW336

Supports 802.1q SSID-to-VLAN Tagging

Cross-Band VLAN Pass-Through

Management VLAN

Spanning Tree

ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270/ECW336

Supports 802.1d Spanning Tree Protocol

QoS (Quality of Service)

ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270/ECW336

Complaint With IEEE 802.11e Standard

WMM

Fast Roaming

ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270/ECW336

802.11r/k

Wireless Security

ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270/ECW336

WPAZ-PSK
WPA2-Enterprise
WPA3-PSK
WPA3-Enterprise
Hide SSID in Beacons
Wireless STA (Client) Connected List
Client Isolation

Environment & Physical Temperature Range

ECW115/ECW120/ECW130/ECW215/ECW220/ECW230/ECW220S/ECW230S/ ECW336

Operating: 32°F~104°F (0 °C~40 °C)

Storage: -40 °F~176 °F (-40 °C~80 °C)

ECW160/ECW260

Operating: -4°~140°F/-20°C~60°C

Storage: -40F°~176°F/-40°C~80°C

ECW270

Operating: -4°~149°F/-20°C~65°C

Storage: -40F°~176°F/-40°C~80°C

Humidity (non-condensing)

ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270/ECW336

Operating: 90% or less Storage: 90% or less

Dimensions & Weight

ECW115
Weight: 225 g
Width: 140 mm
Length: 90 mm
Height: 40 mm
ECW120
Weight: 362.8 g
Width: 161.5 mm
Length: 161.5 mm
Height: 41.6 mm
ECW130
Weight: 634 g
Width: 215 mm
Length: 215 mm
Height: 56 mm
ECW160
Weight: 829.5 g
Width: 111.2 mm
Length: 173.6 mm
Height: 30.29 mm
ECW215
Weight: 269 g
Width: 140 mm
Length: 90 mm
Height: 40 mm
ECW220
Weight: 382 g
Width: 160 mm
Length: 160 mm
Height: 33.2 mm
ECW230
Weight: 597 g
Width: 205 mm
Length: 205 mm
Height: 33.2 mm
ECW220S
Weight: 390 g
Width: 160 mm
Length: 160 mm
Height: 33.2 mm

ECV	V230S
Wei	ght: 607 g
Wid	th: 205 mm
Len	gth: 205 mm
Hei	ght: 33.2 mm
ECV	V260
Wei	ght: 720 g
Wid	th: 124 mm
Len	gth: 190 mm
Hei	ght: 52.5 mm
ECV	V270
Wei	ght: 1870 g
Wid	th: 218 mm
Len	gth: 285 mm
Hei	ght: 53 mm
ECV	V336
Wei	ght: 630 g
Wid	th: 205 mm
Len	gth: 205 mm
Hei	ght: 33.2 mm
_	
	kage Contents
-	
	ECW115 Cloud Managed Indoor Access Point
	Junction Plate (short)
	Junction Plate (tall)
	Mounting Screw Kit
	Quick Installation Guide
	V120
	ECW120 Cloud Managed Indoor Access Point
	T-Rail Mounting Kit
	Ceiling and Wall Mount Screw Kit Mounting Bracket
	5
	Quick Installation Guide
	ECW130 Cloud Managed Indoor Access Point
	Ceiling Mount Base (9/16" Trail)
	Ceiling Mount Base (15/16" Trail)
	Ceiling and Wall Mount Screw Kit
	Quick Installation Guide
	V160
-	ECW160 Cloud Managed Outdoor Access Point
	Pole-Mounting Brackets
	Wall-Mount Screw Set
	2.4GHz 5dBi SMA Antennas
	5GHz 5dBi SMA Antennas
	Quick Installation Guide

ECW215

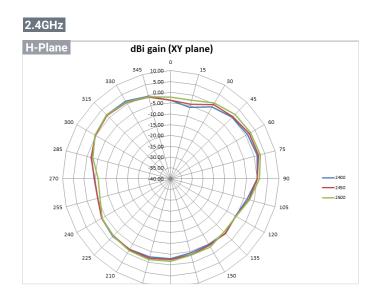
LOW213
1 – ECW215 Cloud Managed Indoor Access Point
1 – Junction Plate (short)
1 – Junction Plate (tall)
1 – Mounting Screw Kit
1 – Quick Installation Guide
ECW220
1 – ECW220 Cloud Managed Indoor Access Point
1 – Ceiling Mount Base (9/16" Trail)
1 – Ceiling Mount Base (15/16" Trail)
1 – Ceiling and Wall Mount Screw Kit
1 – Quick Installation Guide
ECW230
1 – ECW230 Cloud Managed Indoor Access Point
1 – Ceiling Mount Base (9/16" Trail)
1 – Ceiling Mount Base (15/16" Trail)
1 – Ceiling and Wall Mount Screw Kit
1 – Quick Installation Guide
ECW220S
1 – ECW220S Cloud Managed Indoor Access Point
1 – Ceiling Mount Base (9/16" Trail)
1 – Ceiling Mount Base (15/16" Trail)
1 – Ceiling and Wall Mount Screw Kit
1 – Quick Installation Guide
ECW230S
1 – ECW230S Cloud Managed Indoor Access Point
1 – Ceiling Mount Base (9/16" Trail)
1 – Ceiling Mount Base (15/16" Trail)
1 – Ceiling and Wall Mount Screw Kit
1 – Quick Installation Guide
ECW260
1 – ECW260 Cloud Managed Outdoor Access Point
2 – Pole-Mounting Brackets
1 – Wall-Mount Screw Set
2 – 2.4GHz 5dBi SMA Antennas
2 – 5GHz 5dBi SMA Antennas
1 – Quick Installation Guide
ECW270
1 – ECW270 Cloud Managed Outdoor Access Point
2 – Mounting Brackets
1 – Wall-Mount Screw Set
4 – 2.4GHz 5dBi Detachable Antennas
4 – 5GHz 7dBi Detachable Antennas
1 – Quick Installation Guide

ECW336		
1 – ECW336 Cloud Managed Indoor Access Point		
1 – Ceiling Mount Base (9/16" Trail)		
1 – Ceiling Mount Base (15/16" Trail)		
1 – Ceiling and Wall Mount Screw Kit		
1 – Quick Installation Guide		
Compliance Regulatory		
ECW115/ECW120/ECW130/ECW160/ECW215/ECW220/ECW230/ECW260/ ECW220S/ECW230S/ECW270/ECW336		

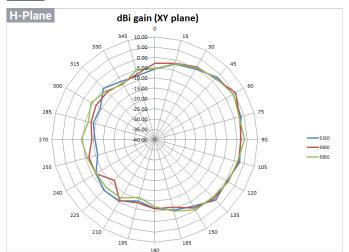
FCC CE IC

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range may vary depending on distance between devices or traffic and bandwidth load in the network.

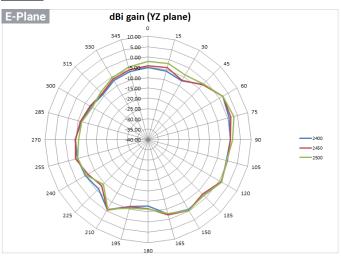
Cloud5 2x2 Wallplate(ECW115) Antenna Patterns

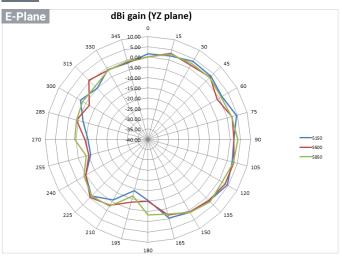


5GHz



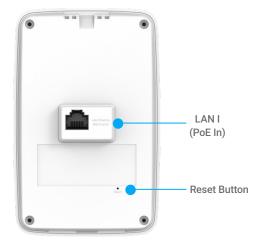
2.4GHz





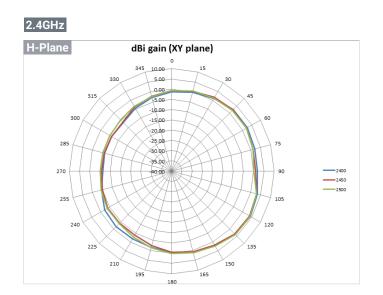
Cloud5 2x2 Wallplate(ECW115) Product Views



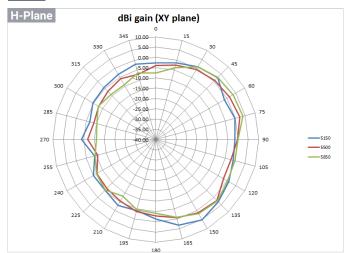


*Only one port of LAN 1/ LAN 2 can be chosen for PoE-In mode simultaneously

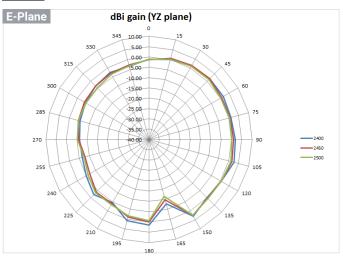
Cloud5 2x2 (ECW120) Antenna Patterns

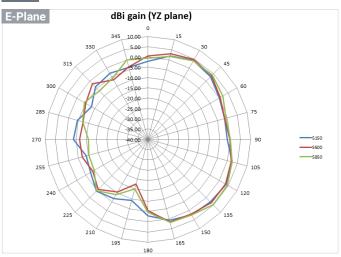


5GHz

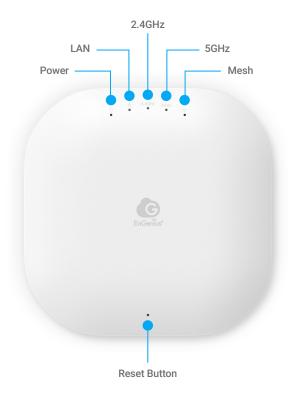


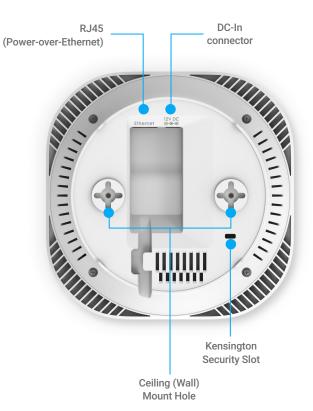
2.4GHz



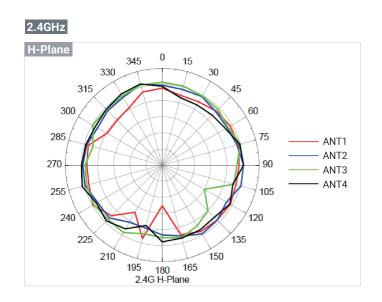


Cloud5 2x2 (ECW120) Product Views

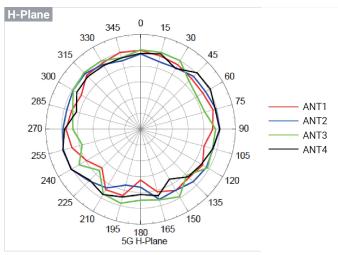




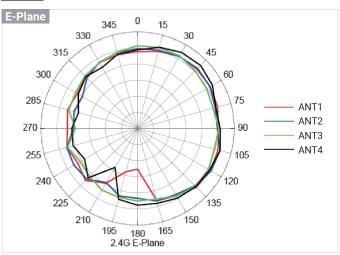
Cloud5 4x4 (ECW130) Antenna Patterns

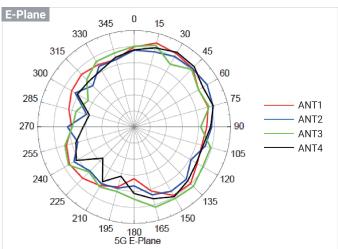




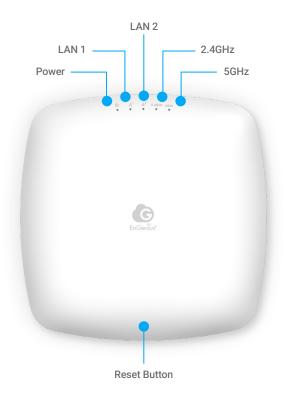


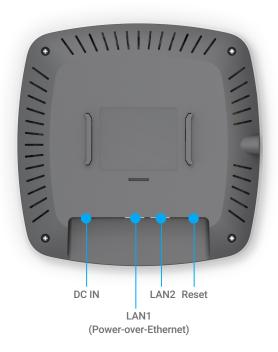
2.4GHz





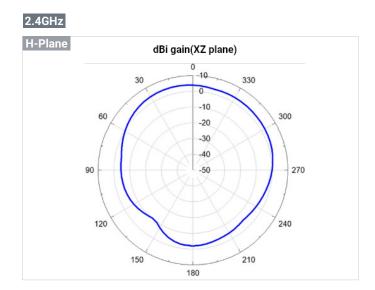
Cloud5 4x4 (ECW130) Product Views



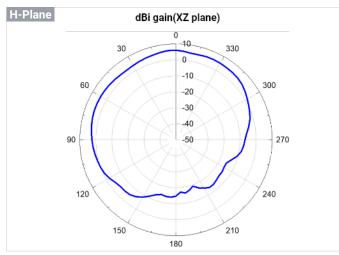




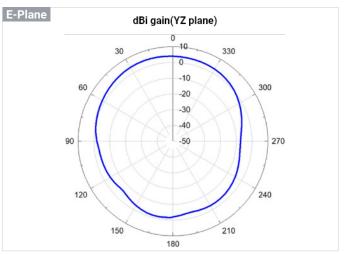
Cloud6 2x2 Wallplate (ECW215) Antenna Patterns

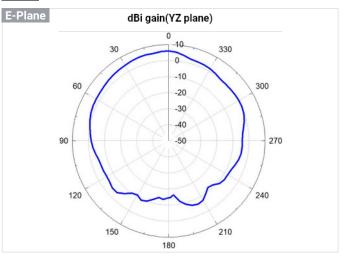


5GHz



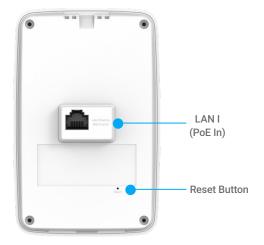


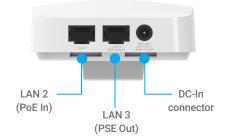




Cloud6 2x2 Wallplate (ECW215) Product Views

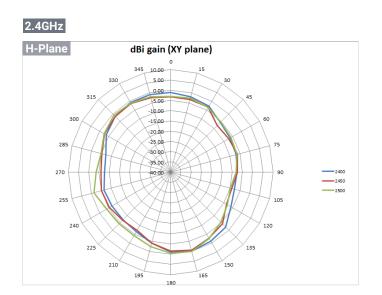




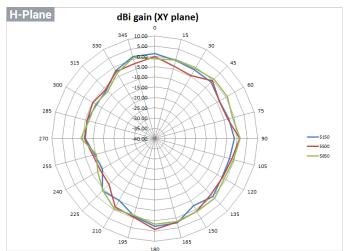


*Only one port of LAN 1/ LAN 2 can be chosen for PoE-In mode simultaneously

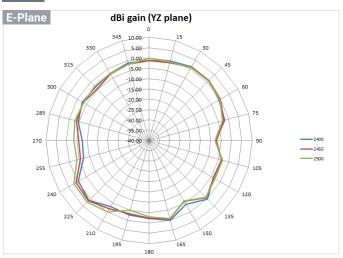
Cloud6 2x2 (ECW220) Antenna Patterns

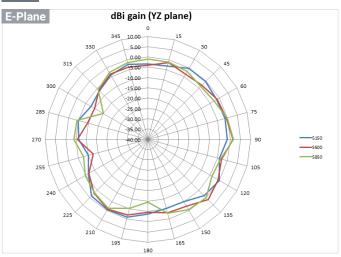


5GHz

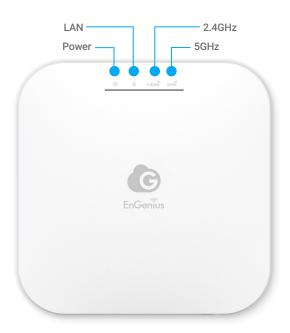


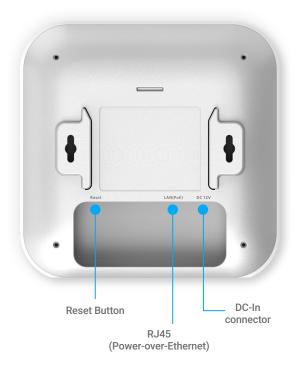
2.4GHz





Cloud6 2x2 (ECW220) Product Views

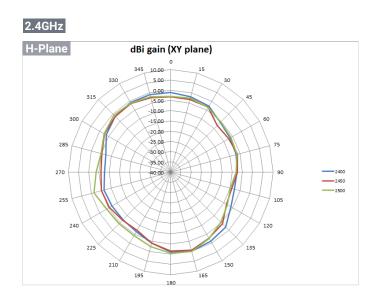




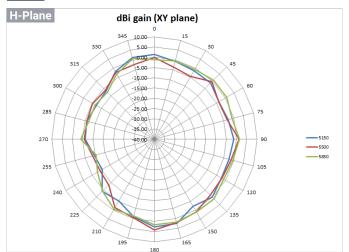




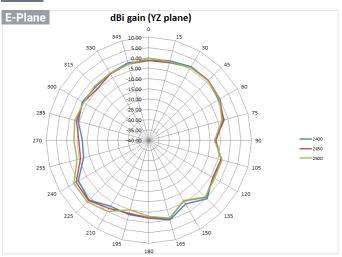
Cloud6 4x4 (ECW230) Antenna Patterns

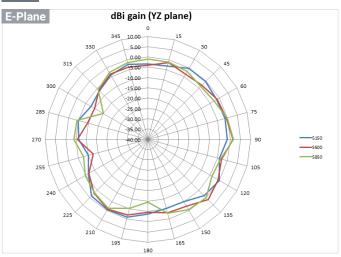


5GHz



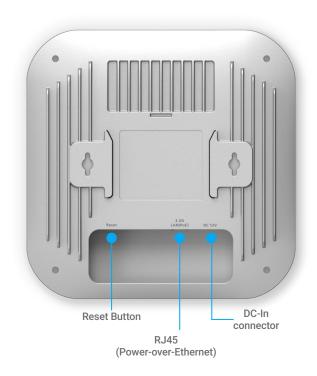
2.4GHz





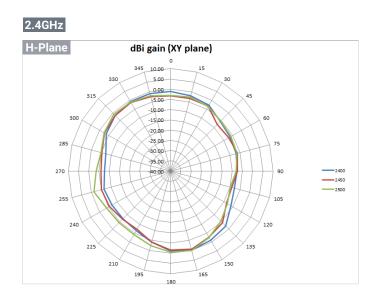
Cloud6 4x4 (ECW230) Product Views



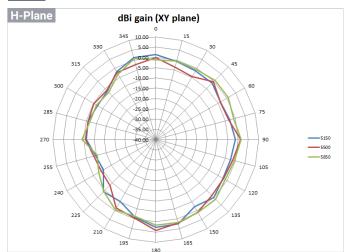


	e 🚥
	Kensington Security Slo

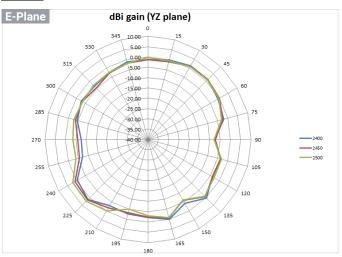
Cloud6 2x2 S (ECW220S) Antenna Patterns

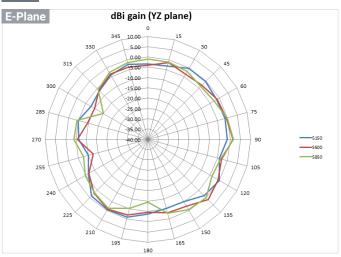


5GHz

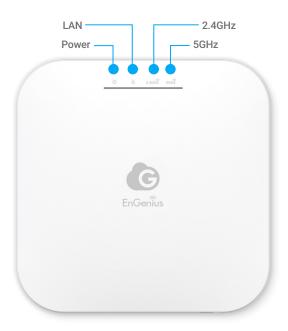


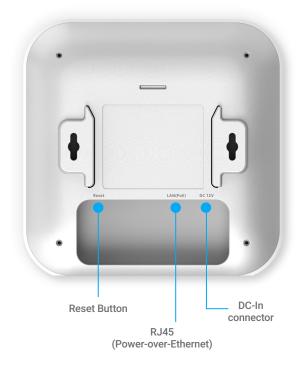
2.4GHz





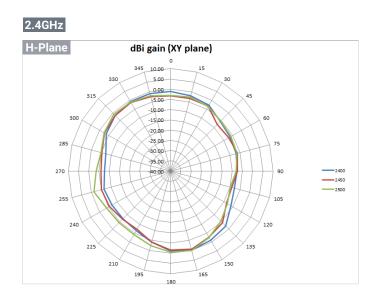
Cloud6 2x2 S (ECW220S) Product Views



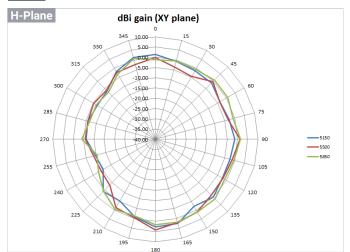




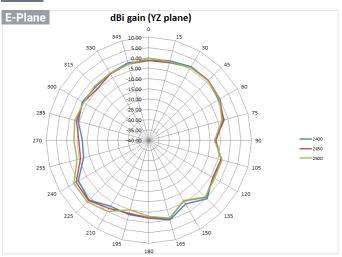
Cloud6 4x4 S (ECW230S) Antenna Patterns

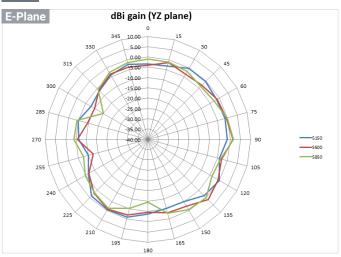


5GHz

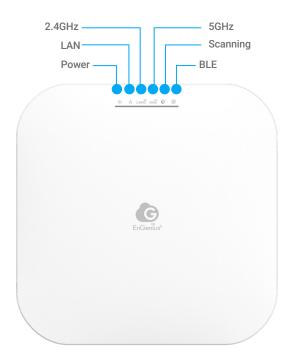


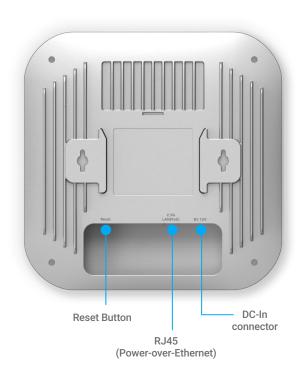
2.4GHz





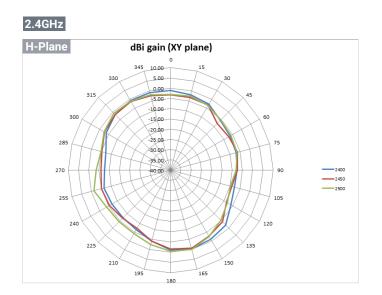
Cloud6 4x4 S (ECW230S) Product Views



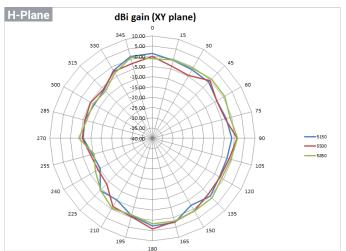




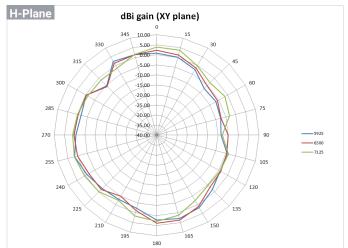
Cloud6E 4x4x4 (ECW336) Antenna Patterns



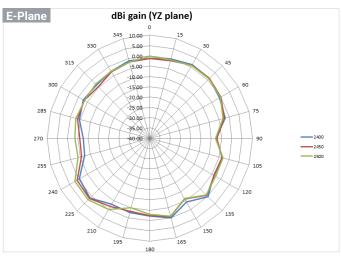
5GHz

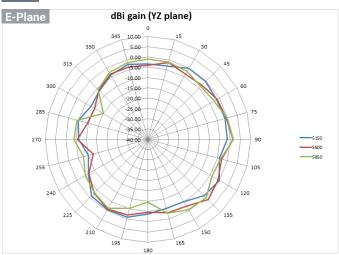




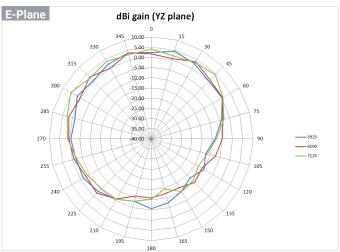


2.4GHz

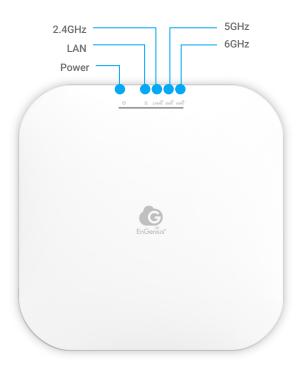


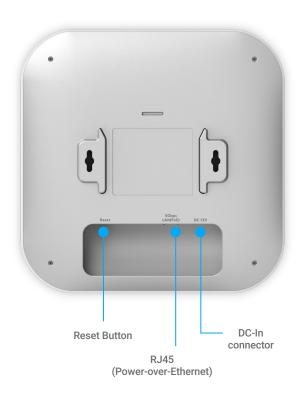






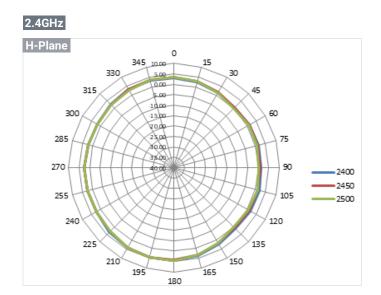
Cloud6E 4x4x4 (ECW336) Product Views



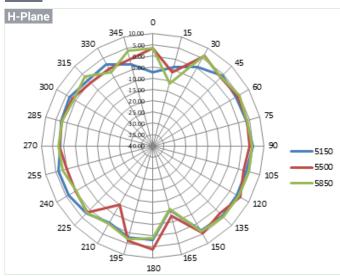




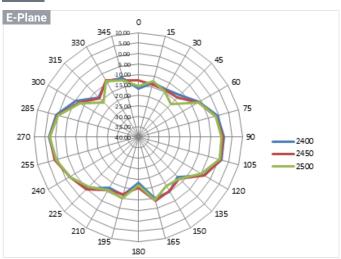
Cloud5 2x2 Outdoor (ECW160) Antenna Patterns

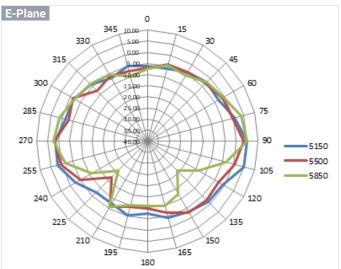




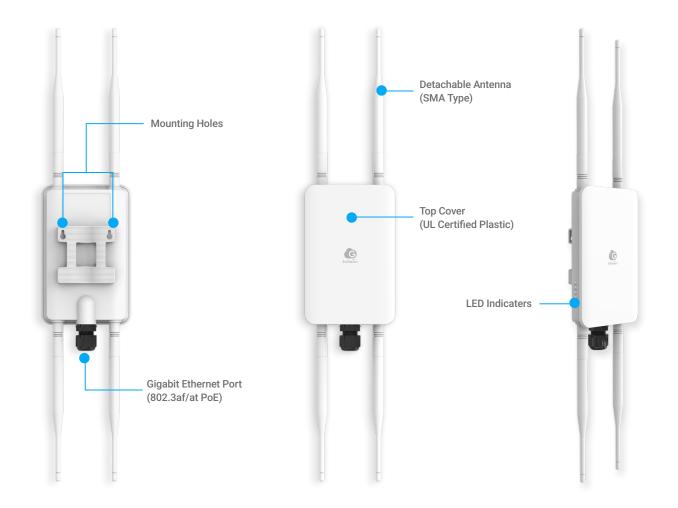


2.4GHz

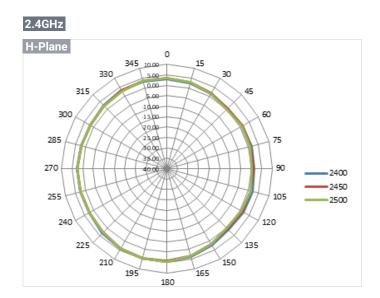




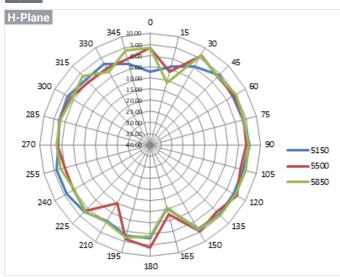
Cloud5 2x2 Outdoor (ECW160) Product Views



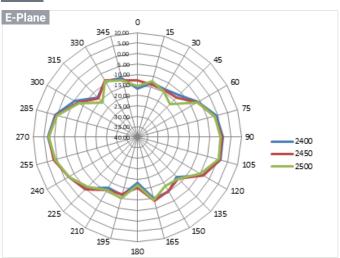
Cloud6 2x2 Outdoor (ECW260) Antenna Patterns

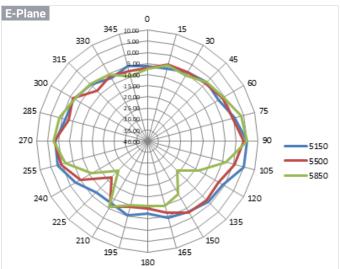




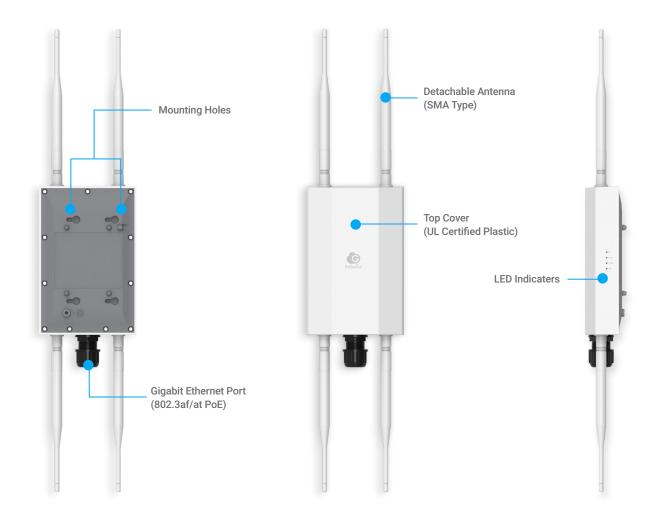


2.4GHz

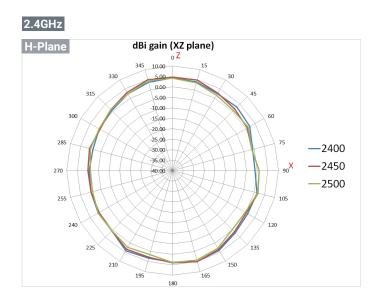




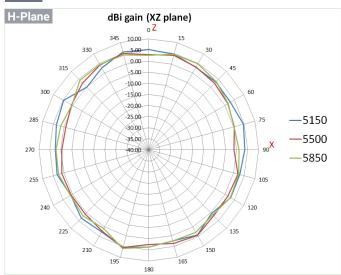
Cloud6 2x2 Outdoor (ECW260) Product Views



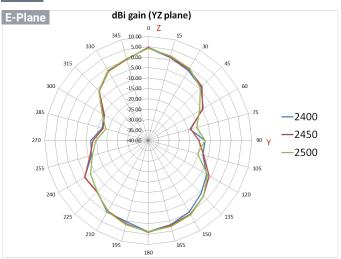
Cloud6 4x4 Outdoor (ECW270) Antenna Patterns

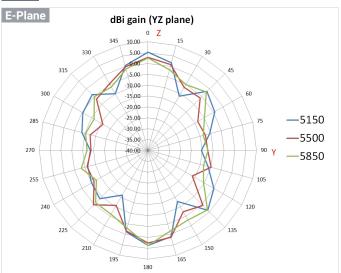




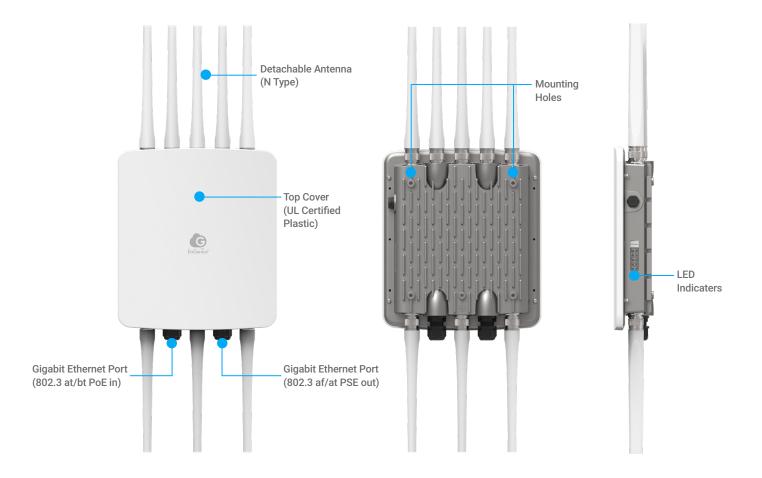


2.4GHz





Cloud6 4x4 Outdoor (ECW270) Product Views



*Make sure use 60W PoE power when PSE out is in use



EnGenius Technologies | Costa Mesa, California, USA

Emaill: support@engeniustech.com Website: www.engeniustech.com Local contact: (+1) 714 432 8668

EnGenius Networks Singapore Pte Ltd. | Singapore

Emaill: techsupport@engeniustech.com.sg Website: www.engeniustech.com.sg Local contact: (+65) 6227 1088 EnGenius Technologies Canada | Ontario, Canada

Email: support@engeniustech.com Website: www.engeniustech.com Local contact: (+1) 905 940 8181

EnGenius Networks Dubai | Dubai, UAE

Emaill: support@engenius-me.com Website: www.engenius-me.com Local contact: (+971) 4 339 1227 EnGenius Networks Europe B.V. | Eindhoven, Netherlands Email: support@engeniusnetworks.eu Website: www.engeniusnetworks.eu Local contact: (+31) 40 8200 887

恩碩科技股份有限公司 | Taiwan, R.O.C.

Email: support@engeniustech.com.tw Website: www.engeniustech.com.tw Local contact: (+886) 2 2652 1808

Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners. Copyright ©2023 EnGenius Technologies, Inc. Version 47 20230321

