



EnGenius Cloud Access Point Series

Optimal Performance, Enterprise Security & Cloud Management

EnGenius Cloud Managed Access Points provide flexible, scalable, and reliable wireless connectivity for a broad range of applications.

Whether you are looking to connect a large office or provide ultra-fast Wi-Fi access to a large resort or campus, cloud-managed access points meet the high density and bandwidth requirements of today's BYOD users.

No matter what size network you need to support, cloud managed flexible access points can meet your needs no matter the size of your network. Big or small, you can deploy and manage an unlimited number of APs on an unlimited number of networks distributed across numerous locations of varying size and infrastructure.

Simple — With easy-to-deploy design and pre-configuration ability, EnGenius access points are operational within minutes. Organizations with limited IT support and budgets can quickly create a reliable, efficiently managed network.

Smart — EnGenius Cloud uses predictive artificial intelligence and access point data collection to help administrators improve network performance and prevent potential issues.

Reliable — EnGenius uses its decades of manufacturing and software development experience, long-lasting chipset vendor relationships, and tight manufacturing processes to provide reliable hardware. EnGenius now offers a 2-year factory warranty for all Cloud products.

Secure — Keep your network safe with two-factor authentication and data encryption on every Cloud device. Minimize potential issues by setting up event-based alerts and receive push notifications through the EnGenius Cloud app. Monitor your network 24/7 for rogue devices and other security threats.

Features & Benefits

- High-Capacity & High-Efficient Wi-Fi 6 (11ax)
- Dual-Radio MU-MIMO Improves Performance, Expands Capacities
- Quick-Scan Device Register & Configuration and Remote Monitoring & Troubleshooting
- Beamforming Technology Optimizes Signal, Reception & Reliability
- Industrial-Grade IP68/IP67 & Ruggedized IP55-Rated Housing Withstands Harsh Environments
- Cloud Manage an Unlimited Number of AP's from Anywhere with the EnGenius Cloud App
- Versatile 4x4 and 2x2 11ax & 11ac Wave 2 Models with Internal & Detachable Antennas
- Advanced Wireless Security WPA 3 Personal (SAE), WPA3/WPA2 Personal mixed and WP3/WP2 Enterprise with Suite B Support
- AirGuard WIPS/WIDS to secure the wireless network 24/7 with dedicated scanning radios



Wi-Fi 6

Benefits to Help Grow Your Business

Next-Generation Wi-Fi in the Cloud

The EnGenius Cloud access points take advantage of the latest wireless Wi-Fi 6 technology, which enables more efficient channel use and reduces latency between AP and client devices. Administrators save maintenance time with ground-breaking features such as uplink and downlink of OFDMA, Target Wake Time, uplink and downlink of MU-MIMO, BSS coloring, spatial reuse, and preamble updates.

Flexibility in Deployment

EnGenius Cloud's versatile line of high-performance, managed, ceiling- and wall-mount access points consist of dual-band high capacity 4x4, and 2x2 Wi-Fi 6 & Wi-Fi 5 versions. Wall plate models serve as all-in-one communication "hubs" for in-room wireless connectivity. Configure access points with a scan of the QR code using the EnGenius Cloud app and manage, monitor, and troubleshoot an unlimited number of devices from a single visually rich interface.

Optimize Connectivity with Wireless Mesh

Use smart mesh mode with a click of a button for retrofit or new install applications where wire runs are not possible. Mesh's smart sensing technology finds nearby access points and auto connects, optimizes routes between APs, and automatically self-heals the network if the AP loses connection.

The Latest in Wi-Fi Security

With EnGenius APs, WPA3 protects your network, delivering next-generation wireless security by making connecting client and IoT devices easier and more secure. EnGenius APs provide enterprise-level security for SMBs with wireless encryption standards such as Wi-Fi protected access encryption. EnGenius security APs come equipped with AirGuard™, an intelligent wireless security system that identifies threats 24/7 using wireless intrusion detection and protection systems. With real-time wireless invasion monitoring, IT administrators receive email alerts and can immediately divert and potentially avoid network hacks and other security threats.

The screenshot displays the EnGenius Cloud management interface. At the top, it shows the user 'Joe Smith' and the 'Access Points' section. A table lists two access points:

Name	MAC	Model Name	Channel	WAN IP	LAN IP	FW Version	Uptime
ECW120 test1	88:DC:96:7C:A0:61	ECW120	6	220.132.176.115	192.168.30.43	1.2.11	22h 20m
ECW120 test2	88:DC:96:7C:A0:46	ECW120	11	220.132.176.115	192.168.30.4	1.2.11	22h 20m

Below the table, detailed configuration for 'ECW120 test1' is shown. It includes a status 'Online' with 0 clients and 610.62 MB download / 33.73 MB upload. The configuration panel shows radio settings for 2.4G and 5G bands, both enabled with 'Auto' channel and '11dBm' / '17dBm' power. The WLAN section shows the SSID status set to 'Public' and 'Enabled'.

Every Cloud Device is Secure and Protected by Advanced Authentication

With EnGenius Cloud, every cloud device is protected with two-factor authentication and non-sequential serial numbers and MAC address verification to ensure only authorized cloud devices are on the network. Once devices are authenticated, the access point establishes a secure tunnel between the device and the cloud with a unique certificate provided by the EnGenius Cloud to encrypt transmissions.

Secure Guest Networks

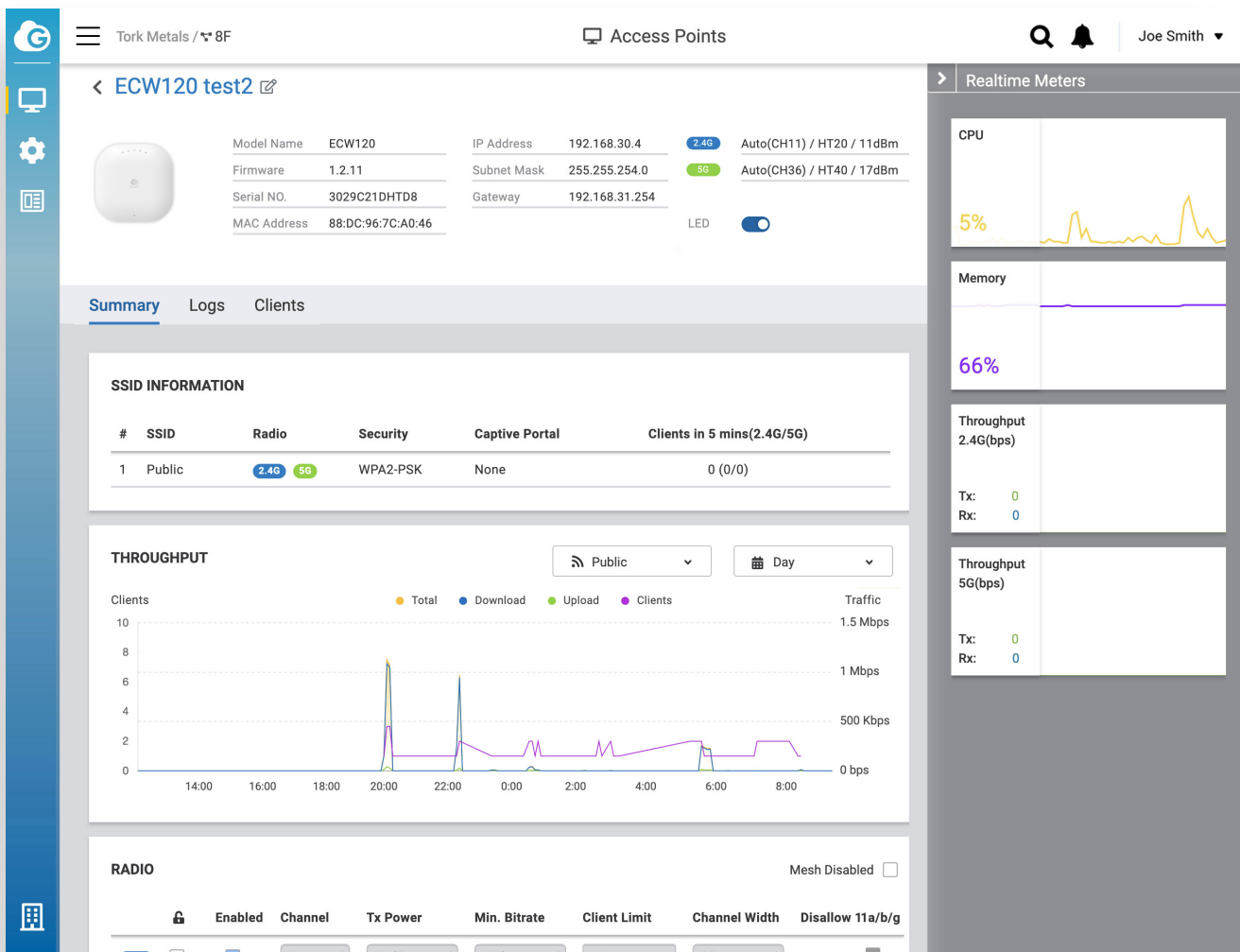
With EnGenius guest network capabilities and FrontDesk Manager voucher service, organizations offering Internet access to patrons or visitors—notably hotels, retail shops and restaurants—can create a secure guest network that blocks access to main corporate computers. By creating separate virtual LANs, organizations increase security, improve network reliability, and conserve bandwidth.

Simplified Deployment & Provisioning

With EnGenius Cloud's plug-and-play installation, administrators can deploy EnGenius Cloud APs quickly — no lengthy setup or complex integration required. The EnGenius Cloud automatically checks & updates firmware, downloads configurations, and joins the assigned organization and network when an EnGenius Cloud access point is plugged in. By using the EnGenius Cloud app, businesses can easily create a network and configure access points from any location.

Manage Your Workload with EnGenius Cloud

EnGenius Cloud's dashboard provides administrators a visual overview of their network health status. Administrators can easily see access point health status and quickly click into access point list to review radio configurations, IP addressing and system information. The Cloud dashboard also highlights the most used access points, SSID's, clients and applications. Administrators can quickly view a snapshot of their overall network's performance and identify potential issues.



Initial Setup, Maintenance & Troubleshooting with EnGenius Cloud

EnGenius Cloud offers several convenient and easy methods to tune, monitor and troubleshoot all access points for a specific site or network.

The AP list gives admins the ability to review all access points in one window to compare resources, 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.

Set maintenance schedules across times zones to improve up-time, allow remote system log to track system modifications or configuration changes, establish event-based email alerts and receive push notifications via the EnGenius Cloud app.

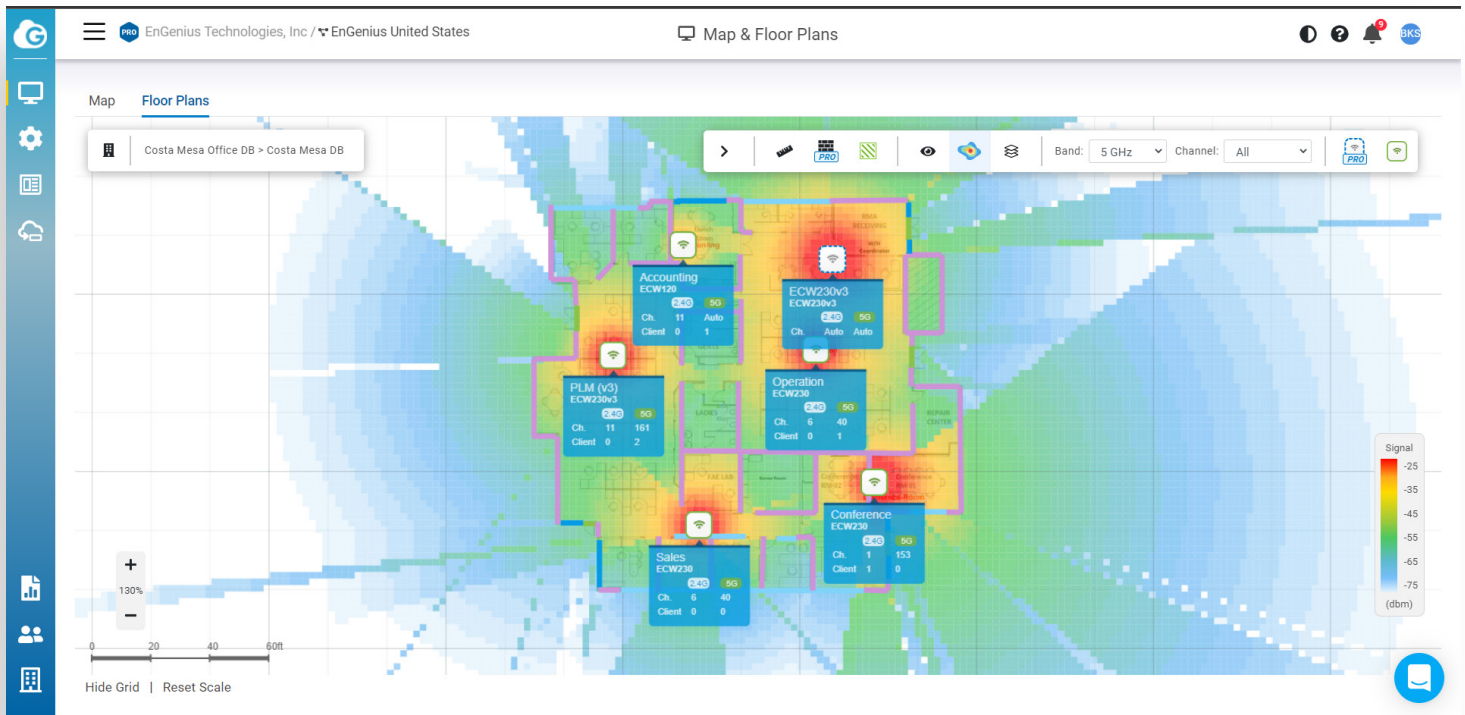
Simplifies Design and Implementation

Implementing Wi-Fi is complicated and takes a skilled hand to do it correctly. Floor Plan view provides administrators a tool for

designing, implementing, monitoring and troubleshooting Wi-Fi networks, all in real-time. The Floor Plans view is an included Cloud Wi-Fi Site Survey tool, designed in-house by EnGenius 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, factoring in physical obstacles and other impediments to your coverage.

Faster Deployments with Pre-Configured Access Points

Improve customer deployment and onboarding time for network administrators with predefined access point configurations. EnGenius Cloud automatically identifies your location and implements the country's regulatory domains to keep access point deployments in compliance. EnGenius Cloud's easy-to-use configuration menu allows administrators to add and define SSID's with wireless configurations, security type and Wi-Fi accessibility into any network. Network administrators can then scan access points, power them up and automatically configure for simplified deployments at customer sites. Advanced features such as L2 Isolation, Band Steering Traffic Shaping, Radius Users and Captive Portal can then be programmed to fine tune access point configurations.





Models	ECW230S	ECW220S	ECW230	ECW220
Standards	Wi-Fi 6 (802.11ax)	Wi-Fi 6 (802.11ax)	Wi-Fi 6 (802.11ax)	Wi-Fi 6 (802.11ax)
Frequency	2.4GHz & 5 GHz	2.4GHz & 5 GHz	2.4GHz & 5 GHz	2.4GHz & 5 GHz
2.4 GHz Max. Data Rate	1,148 Mbps	574 Mbps	1,148 Mbps	574 Mbps
5 GHz Max. Data Rate	2,400 Mbps	1,200 Mbps	2,400 Mbps	1,200 Mbps
Radio Chains/Streams	4x4:4	2x2:2	4x4:4	2x2:2
RF Output Power (2.4 GHz)	23 dBm	22 dBm	23 dBm	22 dBm
RF Output Power (5 GHz)	23 dBm	22 dBm	23 dBm	22 dBm
Ethernet Ports	1 x 2.5 Gigabit Port (PoE+)	1 x Gigabit Port (PoE+)	1 x 2.5 Gigabit Port (PoE+)	1 x Gigabit Port (PoE)
Power-over-Ethernet	802.3at	802.3at	802.3at	802.3af
Power Consumption(Peak)	19.5W	12.8W	19.5W	12.8W
Integrated Antenna	4 x 5 dBi @ 2.4 GHz 4 x 6 dBi @ 5 GHz	2 x 4 dBi @ 2.4 GHz 2 x 5 dBi @ 5 GHz	4 x 5 dBi @ 2.4 GHz 4 x 6 dBi @ 5 GHz	2 x 4 dBi @ 2.4 GHz 2 x 5 dBi @ 5 GHz
DFS Certification	Yes	Yes	Yes	Yes
AirGuard (WIPS/WIDS) Scanning Radios	Yes	Yes	No	No
Zero-wait DFS	Yes	Yes	No	No
Dedicated Scanning Radio	Yes	Yes	No	No
BLE Client Detection	Yes	Yes	No	No

EnGenius Cloud Access Points



Models	ECW120	ECW115	ECW260	ECW160
Standards	Wi-Fi 5 (802.11ac)	Wi-Fi 5 (802.11ac)	Wi-Fi 6 (802.11ax)	Wi-Fi 5 (802.11ac)
Frequency	2.4GHz & 5 GHz	2.4GHz & 5 GHz	2.4GHz & 5 GHz	2.4GHz & 5 GHz
2.4 GHz Max. Data Rate	400 Mbps	400 Mbps	574 Mbps	400 Mbps
5 GHz Max. Data Rate	867 Mbps	867 Mbps	1,200 Mbps	867 Mbps
Radio Chains/Streams	2x2:2	2x2:2	2x2:2	2x2:2
RF Output Power (2.4 GHz)	23 dBm	17 dBm	23 dBm	23 dBm
RF Output Power (5 GHz)	23 dBm	17 dBm	25 dBm	23 dBm
Ethernet Ports	1 x Gigabit Port (PoE)	1 x Gigabit Port (PoE+) Uplink 2x Gigabit Switch Ports Port 1 (PSE)	1 x 2.5 Gigabit Port (PoE+)	1 x Gigabit Port (PoE)
Power-over-Ethernet	802.3af	802.3at	802.3at	802.3af
Power Consumption(Peak)	12W	12W	15.9W	12.6W
Integrated Antenna	2 x 4 dBi @ 2.4 GHz 2 x 5 dBi @ 5 GHz	2 x 4 dBi @ 2.4 GHz 2 x 5 dBi @ 5 GHz	2 x 6 dBi @ 2.4 GHz 2 x 6 dBi @ 5 GHz	2 x 6 dBi @ 2.4 GHz 2 x 6 dBi @ 5 GHz
DFS Certification	No	No	No	No
AirGuard (WIPS/WIDS) Scanning Radios	No	No	No	No
Zero-wait DFS	No	No	No	No
Dedicated Scanning Radio	No	No	No	No
BLE Client Detection	No	No	No	No

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.

EnGenius Technologies | 1580 Scenic Ave. Costa Mesa, CA 92626

Email: partners@engeniustech.com | Website: engeniustech.com

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