

# EnGenius Cloud Solution Brochure

# Visualize Your Networks with Al-driven Cloud

EnGenius Cloud is built on top of the most advanced cloud computing technology. Scalable and Al-ready, the robust and dynamic cloud computing infrastructure helps you work smarter on your network with important analytics and visualization tools.

### Why EnGenius Cloud

Resolve the pain points of traditional networks



Easily manage multiple sites



Precisely debug the networks



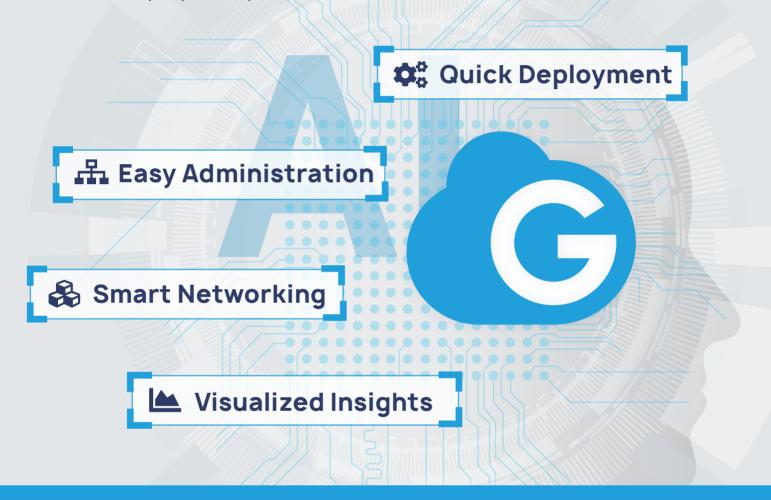
Remotely manage device firmware



Cloud-based Unified Management

### The Smart Cloud Helps You **Achieve More**

Artificial intelligence (AI) enables EnGenius Cloud to predict issues before they occur and provide accurate recommendations to proactively improve performance. EnGenius Cloud's Advisory Board uses Al to continuously analyze networks and report potential problems, often before issues occur.



### **Next-Generation True Cloud Infrastructure** for High Stability and Scalability



#### Serverless

The Cloud is built on the server-less infrastructure without server boundaries



#### **FaaS**

Each function is scalable and works seamlessly with



#### Reliability

The service-level agreement guarantees 99.99% availability for your network

EnGenius Cloud lets you deploy multiple sites with quick registration and configuration, available on your cloud network.



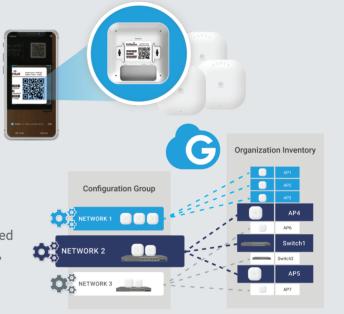
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Register devices with web or mobile app

> Scan a QR code with your device to register it to company inventory on the EnGenius Cloud.

Assign devices to network groups

> Create networks with predefined configuration profiles for Cloud managed devices under the same network group, and then apply this configuration automatically to new devices



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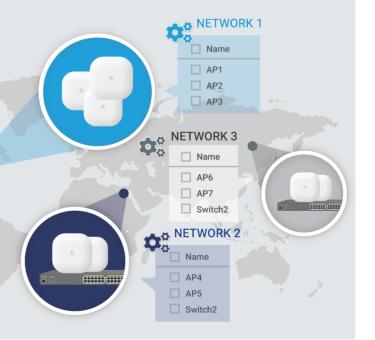
DEPLOYMENT SIT

Unbox devices and connect to your network

> Once plugged in, EnGenius Cloud will push the proper configuration to the device and work as intended.

Multiple site deployment made easy

> With EnGenius Cloud, deploying and managing multiple sites in different timezones and with various network policies is easy.



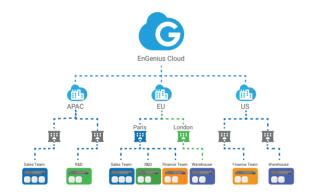
### **Easy Administration**

Get ready for EnGenius Cloud with the easy-to-use features for rapid deployment, initial configuration, and quick registration for one or multiple sites.



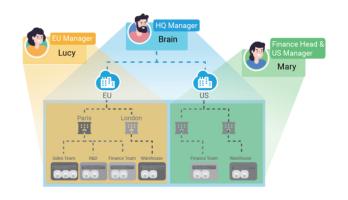
#### Manage your network with hierarchy view

EnGenius Cloud defines the hierarchy view level as a multilayered group of networks. You can manage and monitor company networks with hierarchy view based on different locations or business setups.



#### Multi-tenant design with different roles and privileges

Assign different users with roles and privileges to manage your organization's network sites to best fit your business management policy.



#### Two factor authentication to secure your account

Add an extra layer of security with the two-step verification to protect users' accounts from attack when signing in.



#### Scheduled firmware upgrade for multiple sites and networks

It is easy to deploy and manage multiple sites by creating firmware upgrade tasks for different groups of devices based on region, local timezone, and other configurations.



### **Smart Networking**

### Work Smarter with EnGenius Cloud

EnGenius Cloud makes it simple to manage and monitor multiple sites with hierarchy view, gather real-time device information, and utilize many other benefits to fit your business.



#### AP

#### Quick access to Access Point status

EnGenius Cloud manages all Access Points in a single place. The Access Points list summarizes the most critical current traffic usage data for the network administrator to access quickly.



#### AP

### Master the detailed status of Access Points

Get in-depth information of the SSID, radio, and IP addressing settings for specific Access Point to optimize the network performance according to its policy and have a clear picture of real-time usage, related logs, and connected clients.



#### AP

#### User authentication for Wi-Fi access per SSID

EnGenius Cloud offers various authentication methods for different business requirements. You can configure the AAA authentication all on the Cloud or by Customer's RADIUS server, create a guest Wi-Fi with voucher service, or let users log in by linking to their social media account.



#### **Cloud Authentication**

Authentication and authorization on EnGenius Cloud



#### **Custom Radius**

Use local radius server for authentication



#### **Voucher Service**

Pre-defined access templates and specific portal for front-desk



#### Social Login

Login with a Facebook or Google account



#### AP

#### Customize a splash page for your Captive Portal

Use the WYSIWYG editor to create a pleasing entrance for your captive portal. You can select one of the available templates and place a logo in your preferred position. The customized captive portal properly guides visitor traffic while delivering important messages to your quests.

#### AP

#### Block suspicious clients from your networks

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



#### AP

#### Give devices VIP permission to join networks and bypass Captive Portal

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



#### Switch

#### Quick view of network Switches

Conveniently monitor and troubleshoot all of your network switches in one location with the switch list by checking overall configurations and real-time meters.

# ☐ 7F\_01\_ECS1528FP Ø ● 2.5G ● 5G ● 10G ◎ Disconnected ● Disabled

#### Switch

#### Detailed view of Switch port and PoE status

Check real-time information of port connection state and PoE utilization and make configurations for each port of individual switches.



#### Switch

#### Comprehensive and flexible Switch configuration

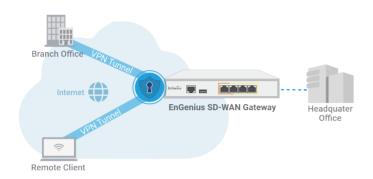
Get full control and flexibility in configuring network switches. Setup network ports, VLAN tags, and other details for one or a group of devices to optimize overall network performance.



#### Gateway

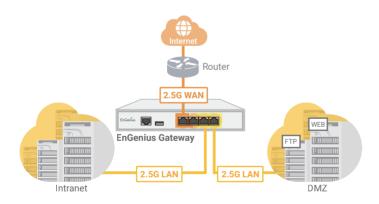
#### Easy setup and Secure SD-WAN connections

Streamline your remote work and communication with site-to-site and client VPN. Forget the complexity of traditional VPN configurations and embrace effortless. secure, and private connections for your business.



#### Optimal performance with four 2.5G Ports

The security gateway has multiple 2.5G ports for dual WAN and dual LAN connection for high-speed WAN environment and in-line architecture design.



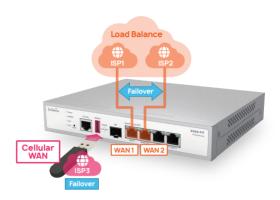
#### Protect Networks with High-throughput Stateful Firewall

EnGenius Security Gateways protect business networks from threats and attacks. The stateful firewall of Gateway integrates corporate security policies and real-time filtering of malicious internet traffic while delivering a high throughput.



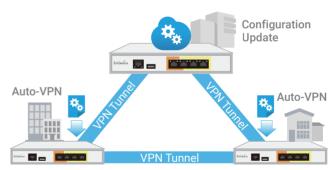
#### Stay Connected with WAN Failover and Cellular Failover

The dual WAN ports are ready for load balance to increase the WAN bandwidth or redundancy links. If all WAN ports go down, the 3G/4G network connection with the USB wireless dongle can provide a backup for the corporate network from disruption.



#### Self-healing Auto VPN for easy networking

EnGenius Gateways will automatically update related VPN information to all peers for continuous VPN connection in the case of WAN IP address reassignment or forwarding port change.



#### Seamless and Secure VPN Client for Remote Working

SecuPoint SSL VPN Client helps businesses with remote workforces to easily establish secure connections to the VPN servers through automated setup and agile certificate authentication.



#### PDU

#### Quick Access to PDU Status

EnGenius Cloud unifies all PDUs in a single platform. The PDU list displays essential power usage data and outlet status for network administrators to access efficiently.



#### PDU

#### Detailed PDU Status & Power Data Statistics

Obtain comprehensive real-time data and power usage statistics for each PDU outlet's current, voltage, and kWh usage, empowering you to optimize power consumption effectively.



#### PDU

#### Individual Outlet Scheduling

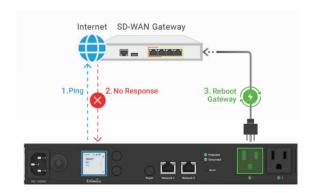
The PDU enables individual outlet scheduling, improving energy management. Users can customize outlet operations, optimizing power use and efficiency.



#### PDU

#### Self-Healing Reboot

The PDU consistently monitors internet connectivity by pinging a reliable hostname. If disconnected, it reboots the gateway outlet, helping in internet restoration.

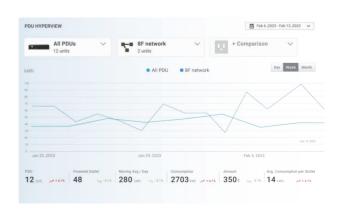


#### PDU

#### Al-Driven Hyperview Dashboard

EnGenius Hyperview dashboard with Al-driven analytics and visualization offers a user-friendly interface for monitoring real-time power metrics while displaying electricity costs to enhance budget management.

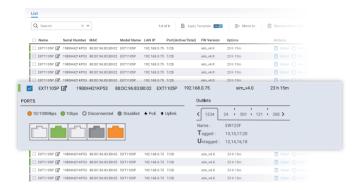
\*The EnGenius PDU series is currently only available in the North American region



#### Switch Extender

#### Quick View of Switch Extenders Status

Easily keep track of and solve issues with your switch extenders by using the device list, allowing you to view their general settings and current measurements in one place.



#### Switch Extender

#### Real-time Monitoring of Ports and PoE **Status**

Real-time monitoring of current status about port connections and PoE usage, and customizing settings for each port on individual switch extenders.



#### Switch Extender

#### Built-in Switch Features for Network Efficiency

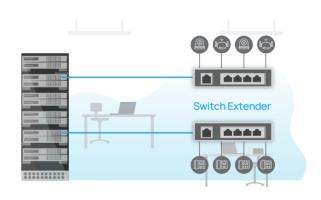
The built-in switch features optimize network performance by assigning VoIP traffic to specific VLANs for enhanced call quality and supporting IGMP Snooping to suppress IPTV traffic for optimized bandwidth usage.



#### **Switch Extender**

#### Simplified Network Extension

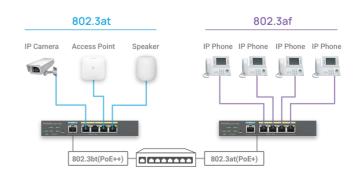
Connect devices to the extender and run one cable to your main switch, streamlining setup, minimizing cabling, and slashing deployment costs for effortless long-distance network expansion.



#### Switch Extender

#### Easy Powering Multiple Devices

EnGenius Switch Extender powers devices efficiently in power-constrained spaces with PSE-out capability, reducing individual power wires while delivering optimized wattage for peak performance.



# Explore the Visualized Interface and Features of EnGenius Cloud

EnGenius Cloud provides reliable performance, predictive analysis, and real-time insights to allow companies to focus on growing their business. The enterprise-class features help IT quickly build reliable and efficiently managed networks.

Learn more of EnGenius Cloud: www.engenius.ai/cloud



#### Visualize Your Networks with Al-driven Cloud

























### Visualized Insights

## Insights from the Big Picture Down to the Smallest Detail

EnGenius Cloud always keeps you updated on your networks status. It performs troubleshooting accurately and effectively, backed by the latest in Al-driven computing insights.

#### Network health at a glance

EnGenius AI is a web-based management platform on EnGenius Cloud that lets you manage your networks from an intuitive central interface. This feature-rich, easy-to-use management tool helps you work more efficiently. Its holistic assessments of real-time network health assist you in pinpointing potential issues and organizing a rapid response.



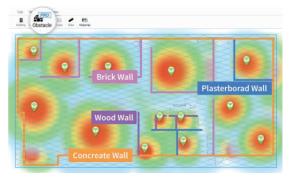
#### Pinpoint issues with the Al-Driven advisory board

Al-powered alerts and recommendations guide you to the appropriate solution whenever any problems occur in your network.



#### Wi-Fi planner calculates optimal AP placement and signal strength on your floor plan

Upload a floor plan and preview your Wi-Fi coverage in simulated conditions with heatmaps that factor in real-world obstacles such as walls.



\* Real environmental effects is available in professional plan.



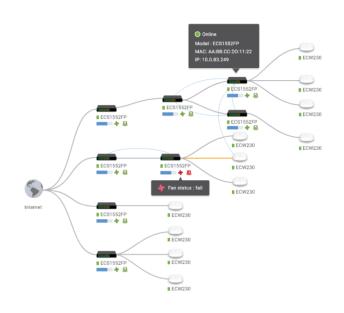
#### Supervise devices with real-time metrics

EnGenius Cloud provides the capability to display device performance in real-time. It breaks down key performance diagnostics such as CPU, memory, and throughput to determine the root cause of any current network problem.

# View the real connections of devices with topology view

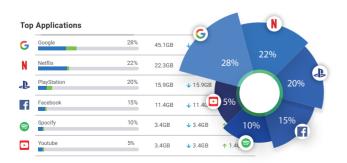
The topology view displays all the devices managed by EnGenius Cloud and the relationships between network devices. You can see the real-time status of Access Points and switches and check the detailed information of PoE status, IP and MAC address, and throughput.

· Third-party devices are visible in professional mode.



# Get information about layer 7 applications

Take full control of the applications in service with layer 7 dashboards for ranking and usage information.



#### Monitor your networks on the go

With the EnGenius Cloud To-Go mobile app, you can always have full control of cloud-managed Switches, Access Points, and devices no matter where you go.







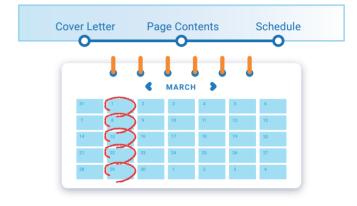


# Empower Your Networking with Professional Features

#### **Scheduling Report**

## Customize and schedule network reports in minutes

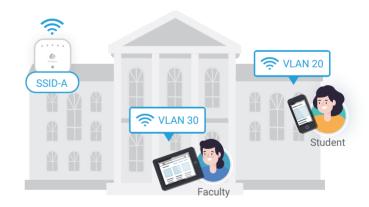
For MSPs to provide regular reports to customers and MIS to continuously track network status, Scheduling Report allows users to generate reports regularly and email to designated persons with customized content, including logo, sender, and selected dashboards.



#### Per-user VLAN

## User-based VLAN to keep your access privilege within network

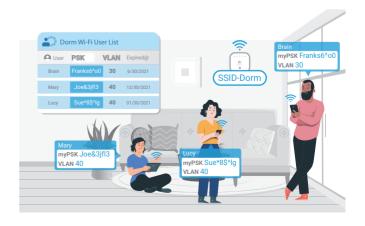
Each client can be assigned to a VLAN to access different network resources even under the same SSID and remain the same VLAN across the network, regardless of the SSID with which they are associated. For example, faculty and students accessing the same SSID will be assigned to different VLANs.



#### myPSK

### Each user has a unique PSK to access the same Wi-Fi Network

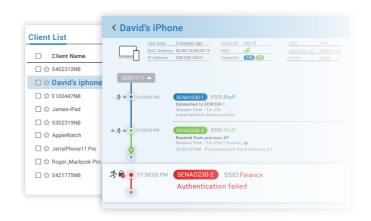
When accessing the same SSID, each tenant will have a unique PSK and be associated with different VLAN tags based on the privilege. In the case of dormitory Wi-Fi management, when a user's unique myPSK expires along with his stay, he or she will no longer be able to access the Wi-Fi network.



#### **Client Timeline**

### Discover potential connection problems with Client Timeline

Pull up the entire history of a client device to trace back the time and behavior when a network problem may have originated.

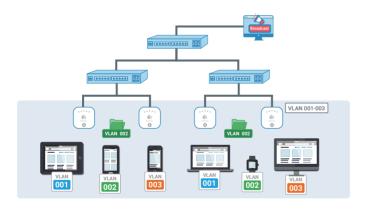




#### Cloud Authentication

## Easy Cloud authentication and voucher services

Use EnGenius Cloud to authenticate client access to the network without the time and cost of deploying an on-premise server. The voucher service is also available to provide users with pre-defined access profiles that help you manage the guest Wi-Fi conveniently.



#### **VLAN Pooling**

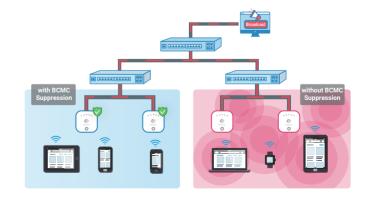
# Automatic partitioning of a broadcast domain to avoid broadcast flooding

To prevent broadcast traffic from flooding the network, Access Point will randomly assign a VLAN from a pool of user-defined VLANs to each client associated with it, thereby automatically separating the broadcast traffic of clients into multiple VLANs.

#### **Broadcast and Multicast Suppression**

## Optimize broadcast and multicast traffic for Wi-Fi networks

When a broadcast or multicast packet floods the subnet, a broadcast storm will reduce network performance. Broadcast and multicast suppression can reduce the number of traffic sending from wired networks to wireless networks.





# Counter the Risk of Wireless Threats with EnGenius **Security Access Points**









**AirGuard WIPS/WIDS** 

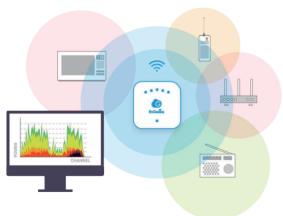
**Spectrum Analysis** 

AirGuard™ is an intelligent wireless security system built into the 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 without degrading network speed at all.

#### AirGuard™

#### AirGuard™ WIPS/WIDS to secure your WLAN

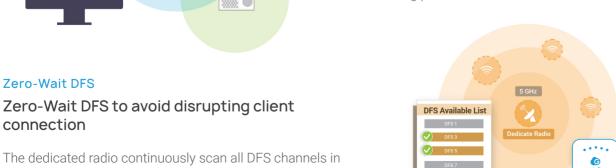
AirGuard™ is an intelligent wireless security system built in to the EnGenius Cloud security AP to protect the airspace from roque devices and wireless threats with dedicated scanning radios.



### RF Spectrum Analysis\*\*

#### Spectrum analysis while maintaining performance

The security AP can perform real-time spectrum analysis of its environment with dedicated radio scanning without decreasing performance.



#### Zero-Wait DFS

### connection

The dedicated radio continuously scan all DFS channels in the background and maintain a list of available DFS channels—preventing client devices from being temporarily disconnected.

<sup>\*\*</sup>Available for AP models with dedicated radio only. (i.e. ECW-xxxS)



#### The Ultimate Wireless Solution - Wi-Fi 7 Access Points

Wi-Fi 7 is the latest Wi-Fi standard that fully utilizes the resources of the three frequency bands (2.4 GHz, 5 GHz, and 6 GHz), emphasizing the 6 GHz band to provide an extensive bandwidth, offering extremely high speed and low latency.



### Wi-Fi 7 Solution Advantages



#### Innovative Features of Wi-Fi 7

#### 2x Wider Bandwidth

#### 320 MHz in 6 GHz band

The three 320 MHz channels Unlock the full potential of the 6 GHz bands with Wi-Fi 7, eliminating bottlenecks and boosting productivity. Get more transmission done in less time for faster speed.

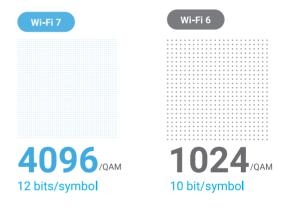


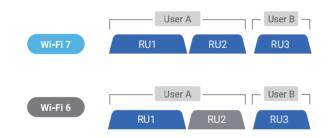


#### 120% Faster Scheme

#### 4K-QAM

The 4096-QAM utilizes a higher modulation scheme to encode data, enhancing throughput and greater capacity by increasing the number of data symbols transmitted per second, enabling more devices a seamless experience.





### **Better Efficiency**

#### Multi-RU & Puncturing

Wi-Fi 7 access point allows multiple devices to transmit and receive data simultaneously. Multi-RU enhances capacity from multiple client devices, while Preamble Puncturing reduces overhead and improves efficiency by using shorter preambles.

### **Minimal Latency**

#### **Multi-Links Operation**

With MLO, Wi-Fi 7 access point empowers devices to seamlessly transmit and receive data across multiple bands and channels simultaneously to increase throughput, reduce latency, and improve reliability.



#### Scenarios Where Wi-Fi 7 Can Boost Business Performance



Business

#### **WORKPLACES**

Fast speed, Low latency

Elevate collaboration and boost productivity in your workspace with Wi-Fi 7. Enjoy blazing-fast speeds and minimal latency, enabling smooth video conferencing, seamless file sharing, and effortless usage of cloud-based applications. Stay connected and maximize your productivity in the most demanding work environments.

Business

#### **INDUSTRIALIOT**

High capacity, Low latency

Realize the revolution of industrial IoT with Wi-Fi 7, delivering unparalleled bandwidth, increased capacity, and ultra-low latency. Seamlessly connect multiple IoT devices, enabling smooth communication, real-time interactions, and automation for manufacturing, logistics, and energy management.





#### **PUBLIC SPACES**

High Capacity, Low Latency

Experience enhanced capacity in high client-density public spaces such as convention centers, transit hubs, and shopping malls with Wi-Fi 7 to meet the ever-growing demand for wireless connectivity. Empower users with reliable, ultra-fast Wi-Fi for seamless browsing, streaming, and real-time information.

Smart Life

#### **ENTERTAINMENT**

High Speed, Low latency

Unleash the full potential of entertainment with Wi-Fi 7. Superior speeds and minimal latency allow Wi-Fi 7 to deliver seamless enjoyment for high-definition 8K streaming, online multiplayer gaming, and immersive virtual reality (VR) experiences.







### **EnGenius Cloud To-Go**

Smart Networking at Your Fingertips

With the EnGenius Cloud To-Go mobile app, you can always have full control of cloud-managed switches, access points, and other devices. Get real-time alerts no matter where you are. Easy device deployment, visualized monitoring, and alerts for abnormal network activity available within an intuitive mobile app.





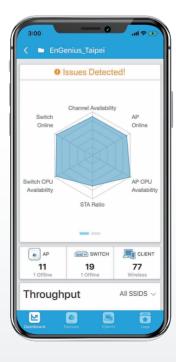
# Easy deployment and configuration

Scan, register, and quickly configure Cloud network devices



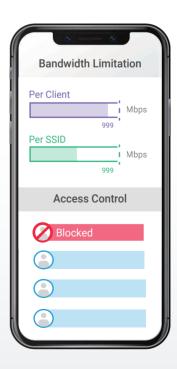
# Simple monitoring and management

Smartly manage Access Points, Switches and clients and stay informed to troubleshoot



# Highly secured and flexible

Rich features your business needs in one place



### Keep Your Network Growing with Your Business



Manage all branch networks remotely



Leverage expertise for local site network management



Expand networks in no time

#### How EnGenius Cloud To-Go Cares for Your Business

#### **Retail Store**



#### Flexible network deployment

Cloud To-Go managed devices can be mounted to ceilings. walls, or poles. They can easily fit into any environment.

#### Always-on networks for business

Cloud networks let vou smoothly run all in-store services that need to be online, such as streaming music and realtime surveillance.

#### Multi-site management

You can easily assign new members to manage and remotely control the networks for all branch businesses.

#### Hospitality



#### Setup-and-go in minutes

Follow the easy stepby-step guidelines of the app to quickly set-up your cloudmanaged devices.

#### Ideal Wi-Fi access for all quests

Set up traffic shaping and bandwidth for your guests to ensure everyone has fast and steady Wi-Fi.

#### In-store messages for branding

Customize the captive portal with your brand to welcome your guests to access the Wi-Fi and share their positive experiences in your store.

#### Small & Home Office



#### Improve the working efficiency

A fast connection for employees to focus and accelerate their work without any latency despite the type of office.

#### Monitor networks remotely

No matter when or where you are, you can check the real-time status and manage settings for your networks with your mobile device.

#### Secure connection and data

The Cloud-managed networks are wellprotected for the connection and data of your company, staff, customers, and visitors.

### Start with essential features and upgrade with Pro licenses.

EnGenius Cloud provides two types of feature plans, Basic and PRO. Set up the feature plan to either Basic or PRO for product categories so that you can use the Basic/Pro feature set in the AP, Switch, Gateway, PDU, and Switch Extender.

Claud License Price	Basic Basic Plan For SOHO, SMB, and fast-growing reta hospitality to manage networks in a si		For SMEs, mana networks require	pfessional Plan ged service providers and ad more advanced features	
Cloud License Price	FREE (no license needed)	_	§ Require Clo	oud PRO License	
	Platform-wide				
Cloud Network Management	Easy Administration  Quick deployment with QR-code scan Hierarchy view & multi-tenant design Two factor authentication Schedule firmware upgrade	,	s to device live view er authentications sh page	Visualized Insights  Network dashboard  Al-driven advisory board  Device real-time metrics  Usage of Layer 7 applications	
Team Members	10 users			Unlimited	
Max Network no. in an Org	50			5000	
Cloud Radius and Voucher Service	100 entries			10000 entries	
Clone Network	-			V	
Client List Export	-			V	
Scheduling Report System	1 report			V	
Customer Support	Limited support		Priority s	support with on-line tool	
PRO AP Access Point					
Statistic Data Stored	3 days			30 days	
Client Timeline	-		V		
Wi-Fi Floor Plan Heatmap	V		V		
Wi-Fi Floor (Obstacle & Virtual AP)	-		V		
myPSK (dynamic/private PSK)	-		V		
VLAN Pooling	-		V		
Broadcast Suppression	_		V		
Auto VPN (with ESG)	_		V		
AD / LDAP / Google Authentication/Azure AD	-		V		
Live Diagnostic Tools	Limited		V		
Live Client List	_		V		
RF Spectrum Analysis **	-		V		
AirGuard**	-			V	
Zero-Wait DFS **	V		V		
BLE Client List*	V			V	
Smartcasting	-			V	
Radius Load Balance	-			V	
SSID on LAN	V			V	
Packet Capture	-		V		
Block/VIP Client	100		1000		
Change Log	V		V(More Details)		
Alert Notification	On-line/Off-line		V		
Backup & Restore	-		V		
API Integration (3rd Party)	_			V	

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	Basic Plan For SOHO, SMB, and fast-growing reta hospitality to manage networks in a sin	PRO Professional Plan  For SMEs, managed service providers and networks required more advanced features			
Cloud License Price	FREE (no license needed)	FREE (no license needed)		oud PRO License	
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Cloud Network Management	Easy Administration  Quick deployment with QR-code scan Hierarchy view & multi-tenant design Two factor authentication Schedule firmware upgrade	`	s to device live view ser authentications ash page	Visualized Insights  Network dashboard  Al-driven advisory board  Device real-time metrics  Usage of Layer 7 applications	
PRO SW Switch					
Statistic Data Stored	3 days			30 days	
SwitchTemplate (Port Configuration)	_			V	
Network Topology	EnGenius devices only		EnG	enius and 3rd-party	
Real-time Wired Client List	-			V	
PD Lifeguard	V		V		
Auto Cam Lifeguard	-		V		
IGMP	Basic		V		
Extended Range	V		V		
Switch Backup & Restore	-		V		
Packet Capture (.pcap)	_		V		
Diag Tools	Limited		Full / real-time client		
MAB (MAC Auth Bypass)	_		V		
Change Log	V		V(More Details)		
Alert Notification	On-line/Off-line		V		
Backup & Restore	_		V		
API Integration (3rd Party)	_		V		
PRO GW Gateway					
Statistic Data Stored	3 days			30 days	
Auto VPN	V			V	
Auto VPN NAT Traversal	-	-		V	
VPN Topology	-			V	
VPN Traffic Usage	_			V	
VPN Client (IPsec)	V		V		
Network Clone	-		V		
Change Log	V	V		V	
Alert Notification	On-line/Off-line		V		
Backup & Restore	-		V		
API Integration (3rd Party)	-		V		

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Cloud License Price	FREE (no license needed)		§ Require Clo	oud PRO License	
	Platform-wide				
Cloud Network Management	Easy Administration  Quick deployment with QR-code scan Hierarchy view & multi-tenant design Two factor authentication Schedule firmware upgrade		s to device live view ser authentications ash page	Visualized Insights  Network dashboard  Al-driven advisory board  Device real-time metrics  Usage of Layer 7 applications	
PRO SW PDU					
Statistic Data	3 days		30 days		
Change Log	Basic		V(More details)		
Alert Notification	On-Off only		Advanced		
Backup & Restore	-		V		
API Integration (3rd Party)	_		V		
PRO SW Switch Extender					
Statistic Data	-			30 days	
Change Log	-		V		
Alert Notification	_		V		
Backup & Restore	_		V		
API Integration (3rd Party)	_			V	

<sup>\*</sup>The EnGenius PDU series is currently only available in the North American region

# Cloud - Access Points

			Indoor			
	<u>6</u>	<u>.</u>	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6	Wi-Fi 6
Models Name	Cloud5 2x2	Cloud5 4x4	Cloud6 2x2 Wallplate	Cloud6 2x2	Cloud6 2x2 S	Cloud6 4x4
Models Number	ECW120	ECW130	ECW215	ECW220	ECW220S	ECW230
Wi-Fi Standard	11ac Wave 2	11ac Wave 2	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)	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	800 Mbps	600 Mbps	600 Mbps	600 Mbps	1200 Mbps
Data Rate (5 GHz)	867 Mbps	1800 Mbps	1200 Mbps	1200 Mbps	1200 Mbps	2400 Mbps
Data Rate (6 GHz)	-	-	-	-	-	-
Radio Chains	2 × 2:2	4 × 4:4	2 × 2:2	2 × 2:2	2 × 2:2	4 × 4:4
Tx Power (2.4 GHz)	23 dBm	25 dBm	20 dBm	22 dBm	22 dBm	23 dBm
Tx Power (5 GHz)	23 dBm	24 dBm	20 dBm	22 dBm	22 dBm	23 dBm
Tx Power (6 GHz)	-	-	-	-	-	-
Antennas (2.4 GHz)	2 x 5 dBi Omni	2 x 4 dBi Omni	2 x 4 dBi Omni	2 x 4 dBi Omni	2 x 4 dBi Omni	4 x 5 dBi Omni
Antennas (5 GHz)	2 x 5 dBi Omni	2 x 6 dBi Omni	2 x 5 dBi Omni	2 x 5 dBi Omni	2 x 5 dBi Omni	4 x 6 dBi Omni
Antennas (6 GHz)	-	-	-	-	-	-
PoE Standard	802.3af	802.3at	802.3af/at	802.3af/at	802.3af/at	802.3at
Scanning Radio	-	-	-	-	•	-
BLE	-	-	-	-	•	-
Power Consumption (Peak)	12W	19.1W	14.2W	12.8W	12.8W	19.5W
Ethernet Port	1x GE PoE port	1x GE PoE+port 1x GE port	2x GE PoE+ ports 1x GE PSE Out port	1x GE PoE port	1x GE PoE+ port	1x 2.5GE PoE+ port
Mounting	Wall/ Ceilling	Wall/Ceilling	Wall	Wall/ Ceilling	Wall/ Ceilling	Wall/ Ceilling
IP Rating	N/A	N/A	N/A	N/A	N/A	N/A
Dimensions	161 x 161 x 41 mm	215 x 215 x 56mm	140 x 90 x 40 mm	160 x 160 x 33 mm	160 x 160 x 33 mm	205 x 205 x 33 mm
Mesh Technology	•	•	•	•	•	•
Mobile app (Cloud To-Go)	•	•	•	•	•	•

		Indoor				Outdoor	
	Wi-Fi 6	Wi-Fi 6E	Wi-Fi 7	Wi-Fi 7	4.4	Wi-Fi 6	Wi-Fi 6
			<u>e</u>	<u>@</u>		٠	<u>o</u>
					787	787	p=q=p
Models Name	Cloud6 4x4 S	Cloud6E 4x4x4	Cloud7 2x2x2	Cloud6E 4x4x4	Cloud5 2x2 Outdoor	Cloud6 2x2 Outdoor	Cloud6 4x4 Outdoor
Models	ECW230S	ECW336	ECW526	ECW536	ECW160	ECW260	ECW270
Wi-Fi Standard	Wi-Fi 6 (11ax)	Wi-Fi 6E (11ax)	Wi-Fi 7(11be)	Wi-Fi 7 (11be)	11ac Wave 2	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)
Frequency	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz & 6 GHz	2.4 GHz & 5 GHz & 6 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	1,200 Mbps	700 Mbps	1,400 Mbps	400 Mbps	600 Mbps	1200 Mbps
Data Rate (5 GHz)	2400 Mbps	2,400 Mbps	2,900 Mbps	5,800 Mbps	867 Mbps	1200 Mbps	2400 Mbps
Data Rate (6 GHz)	-	4,800 Mbps	5,800 Mbps	11,600 Mbps	-	-	-
Radio Chains	4 × 4:4	4 × 4:4	2 × 2:2	4 × 4:4	2 × 2:2	2 × 2:2	4 x 4:4
Tx Power (2.4 GHz)	23 dBm	23 dBm	25 dBm	25 dBm	23 dBm	23 dBm	24 dBm
Tx Power (5 GHz)	23 dBm	23 dBm	24 dBm	24 dBm	23 dBm	25 dBm	24 dBm
Tx Power (6 GHz)	-	23 dBm	24 dBm	24 dBm	-	-	-
Antennas (2.4 GHz)	4 x 5 dBi Omni	4 x 5 dBi Omni	2 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	2 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	2 x 6 dBi Omni	4 x 5 dBi Omni	-	-	-
PoE Standard	802.3at	802.3at	802.3at	802.3bt	802.3af/at	802.3af/at	802.3at/bt
Scanning Radio	•	-	-	-	-	-	-
BLE	•	-	-	-	-	-	-
Power Consumption (Peak)	19.5W	22.5W	18W	38W	12.6W	15.9W	46W
Ethernet Port	1x 2.5GE PoE+ port	1x 5GE PoE+ port	1x 10GE PoE+port	1x 10GE PoE++port 1x 10GE port	1x GE PoE+ port	1x 2.5GE PoE+ port	1x 2.5GE PoE++ port 1x GE PSE Out port
Mounting	Wall/ Ceilling	Wall/ Ceiling	Wall/ Ceiling	Wall/ Ceiling	Wall/ Pole	Wall/ Pole	Wall/Pole
IP Rating	N/A	N/A	N/A	N/A	IP67	IP67	IP68
Dimensions	205 x 205 x 33 mm	205 x 205 x 33 mm	190 x 190 x 39.5 mm	230 x 230 x 37mm	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)	•	•	•	•	•	•	•

# Cloud - Switches

	Gigabit Switch								
								al	
Models Name	L2Plus 8 PoE	L2Plus 8 Full PoE	L2Plus 24	-	L2Plus 24 PoE	L2Plus 24 Full PoE	L2Plus 48	L2Plus 48 PoE	L2Plus 48 Full PoE
Model Number	ECS1008P	ECS1112FP	ECS1528T	ECS1528	ECS1528P	ECS1528FP	ECS1552	ECS1552P	ECS1552FP
Switch Class	Layer 2+								
Gigabit Ethernet Ports	8	10	24	24	24	24	48	48	48
Multi-Gigabit Ethernet Ports	-	-	-	-	-	-	-	-	-
SFP Ports	-	2	-	-	-	-	-	-	-
SFP+ Ports	-	-	4	4	4	4	4	4	4
RJ45 Console Port	-	•	•	•	•	•	•	•	•
Form Factor	9.45" (desktop)	13" 1U	13" 1U	19" 1U					
Power-over-Ethernet	802.3af	802.3af/at	-	-	802.3af/at	802.3af/at	-	802.3af/at	802.3af/at
Total PoE Budget	55W	130W	-	-	240w	410w	-	410w	740w
PoE Capable Ports	Ports 1-8	Ports 1-8	-	-	Ports 1-24	Ports 1-24	-	Ports 1-48	Ports 1-48
Switching Capacity	16Gbps	24Gbps	128Gbps	128Gbps	128Gbps	128Gbps	176Gbps	176Gbps	176Gbps
Packet Forwarding Rate (Mpps)	11.904Mpps	17.856Mpps	95.23Mpps	95.23Mpps	95.23Mpps	95.23Mpps	130.95Mpps	130.95Mpps	130.95Mpps
MAC Address Table	8K	8K	16K	16K	16K	16K	32K	32K	32K
Packet Buffer Memory	512KB	512KB	1.5MB	1.5MB	1.5MB	1.5MB	2MB	2MB	2MB
Full load Power consumption	62.05 Watts	152.8 Watts	24.41 Watts	24.41 Watts	297.6 Watts	500.46 Watts	43.92 Watts	476.3 Watts	885 Watts
*PoE Extended Mode	•	•	-	-	•	•	-	•	•
PD Lifeguard	•	•	-	-	•	•	-	•	•
Continuous PoE Power	•	•	-	-	•	•	-	•	•
Dimension	240mm x 105mm x 27mm	330mm x 230mm x 44mm	330mm x 230mm x 44mm	440mm x 260mm x 44mm	440mm x 310mm x 44mm	440mm x 310mm x 44mm			

	Multi-G Switch							
	D	A	A MARKANANA ****			© 1000000000000000000000000000000000000	D	
Models Name	MGPlus 8 Full PoE	MGPlus 8	MGPlus 8 Full PoE	MGPlus 24 Full PoE	MGPlus 48 Full PoE	Aggregate 8XG	Aggregate 8XG Full PoE	Aggregate 12
Model Number	ECS2510FP	ECS2512	ECS2512FP	ECS2528FP	ECS2552FP	ECS5512	ECS5512FP	ECS5512F
Switch Class	Layer 2+	Layer 2+	Layer 2+					
Gigabit Ethernet Ports	-	-	-	16	32	-	-	-
Multi-Gigabit Ethernet Ports	8x2.5G	8x2.5G	8x2.5G	8x2.5G	16x2.5G	8 x 10G	8 x 10G	-
SFP Ports	-	-	-	-	-	-	-	-
SFP+ Ports	2	4	4	4	4	4	4	12
RJ45 Console Port	•	•	•	•	•	•	•	•
Form Factor	13" 1U	13" 1U	13" 1U	19" 1U	19" 1U	13″ 1U	13″ 1U	Half Rack
Power-over-Ethernet	802.3af/at	-	802.3af/at/bt	802.3af/at	802.3af/at	-	802.3af/at/bt	-
Total PoE Budget	240w	-	240w	410w	740w	-	420w	-
PoE Capable Ports	Ports 1-8	-	Ports 1-8	Ports 1-24	Ports 1-48	-	Ports 1-8	-
Switching Capacity	80Gbps	120Gbps	120Gbps	152Gbps	224Gbps	240Gbps	240Gbps	240Gbps
Packet Forwarding Rate (Mpps)	59.52 Mpps	89.29 Mpps	89.29 Mpps	113.10 Mpps	166.67 Mpps	178.57 Mpps	178.57 Mpps	178.57 Mpps
MAC Address Table	16k	16k	16k	16k	32k	32k	32k	32k
Packet Buffer Memory	512KB	512KB	512KB	1.5MB	2MB	2MB	2MB	2MB
Full load Power consumption	270.47 Watts	23.52 Watts	299 Watts	499.85 Watts	913 Watts	29.22 Watts	506.7 Watts	43.4 Watts
*PoE Extended Mode	-	-	-	•	•	-	-	-
PD Lifeguard	-	-	-	•	•	-	-	-
Continuous PoE Power	-	-	-	•	•	-	-	-
Dimension	330mm x 230mm x 44mm	330mm x 230mm x 44mm	330mm x 230mm x 44mm	330mm x 260mm x 44mm	330mm x 310mm x 44mm	330mm x 230mm x 44mm	330mm x 230mm x 44mm	330mm x 230mm x 44mm

# Cloud - SD-WAN Gateways

SD-WAN Gateway					
Models Number	ESG510	ESG610	ESG620		
Processor	Quad Core	Quad Core	Quad Core		
Operating Frequency	@1.6GHz	@2.2GHz	@2.2GHz		
Memory	4GB	8GB	8GB		
Flash Storage	8GB	8GB	16GB		
RJ-45 Interface	4 x 2.5G	4 x 2.5G	8 x 2.5G		
SFP interface	-	-	2 x 10G		
PoE ports	1	1	4		
PoE Standard	802.3 af/at	802.3 af/at	802.3 af/at		
I/O Interfaces	1 x RJ-45 console/1 x USB 3.0	1 x RJ-45 console/1 x USB 3.0	1 x RJ-45 console/1 x USB 3.0		
Mounting Method	Wall mount	Wall mount	Rack mount		
Firewall (SPI throughput)	4G	6.7G(**)	9.5G(**)		
VPN throughput	970M	1.7G(**)	1.7G(**)		
Max. Concurrent VPN Tunnels	200	300(**)	300(**)		
Max. Concurrent VPN Users*	250	500(**)	500(**)		
Max. TCP Concurrent Sessions	1,000,000	1,250,000 (**)	1,500,000 (**)		
Max VLAN	96	256(**)	256(**)		
Power	54V/1.2A	54V/1.2A	300w internal power		
Operation Temperature	0°C to 40°C	0°C to 40°C	0°C to 50°C		
Humidity (non-condensing)	5 to 95% non-condensing	5 to 95% non-condensing	5 to 95% non-condensing		
Dimensions	210 x 179.5 x 35 mm	210 x 179.5 x 35 mm	330 x 230 x 44 mm		
Package Contents	- Power Adapter - Power Cord - RJ-45 Console Cable - Wall Mount Kit - Quick Installation Guide	- Power Adapter - Power Cord - RJ-45 Console Cable - Wall Mount Kit - Quick Installation Guide	- Power Cord - RJ-45 Console Cable - Rack Mount Kit - Quick Installation Guide		
Regulatory Compliance	- FCC Part 15 (Class B) - IC - CE EMC - CB - UL	- FCC Part 15 (Class B) - IC - CE EMC - CB - UL	- FCC Part 15 (Class B) - IC - CE EMC - CB - UL		

<sup>\*</sup>The test methodology is based on RFC2544 to have maximum throughput. Actual performance may be different under different testing condition and services enabled

<sup>\*\*</sup>The performance no are estimated number for reference only. Specifications are subject to change with final test results

# Cloud - PDUs and Extenders

	PDU	
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Models Name	PDU 6P 12A 100-120V	PDU 14P 12A 100-120V
Model Number	ECP106	ECP214
Dimensions	440 x 44 x 70 mm	440 x 88 x 88 mm
Weight	1035 g	2430 g
Enclosure Material	AL6063	SECC
Networking Interfaces	10/100/1000 BASE-T	10/100/1000 BASE-T
Management Interface	Ethernet	Ethernet
Power Output	NEMA-5-15R, 120V AC, 15A max.,60Hz	NEMA-5-15R, 120V AC, 15A max.,60Hz
Power Method	100-120VAC, 12A max.,50/60Hz	100-120VAC, 12A max.,50/60Hz
Max. Power Consumption	1440W for 120V AC	1440W for 120V AC
Buttons	-Factory Reset -Circuit Breaker -Outlet Power Button -LCD Control Buttons	-Factory Reset -Circuit Breaker -Outlet Power Button -LCD Control Buttons
Protection	Surge Protection Gounded Protection	Surge Protection Gounded Protection
LCM Display	1.3 RGB display, Non-touch Firmware Upgradable	1.3 RGB display, Non-touch Firmware Upgradable
Operating Temperature	Operating: 0°C ~ +50°C	Operating: 0°C ~ +50°C
Operating Humidity	Humidity 5% ~ 95% RH Non-condensing	Humidity 5% ~ 95% RH Non-condensing
Certifications	FCC, IC, UL1449 type5, UL62368-1,CSA22.2	FCC, IC, UL1449 type5, UL62368-1,CSA22.2

<sup>\*</sup>The EnGenius PDU series is currently only available in the North American region

	Switch Extender	
	a assa	
Models Name	Switch Extender 4 PoE	Switch Extender 4GE 1 SFP
Model Number	EXT1105P	EXT1106
SW Type	Gigabit Switch	Gigabit Switch
Feature labels (product image)	PD Switch	PD Switch
Switch Class	Switch Extender	Switch Extender
Gigabit Ethernet Ports	5	5
Multi-Gigabit Ethernet Ports	-	-
SFP Ports	-	1
SFP+ Ports	-	-
RJ45 Console Ports	-	-
Form Factor	6.7" (desktop)	4.92" (desktop)
Power-over-Ethernet	802.3 af/at	-
Total PoE Budget	Up to 60w	-
PoE Capable Ports	Ports 1-4	-
Switching Capacity	10Gbps	12Gbps
Packet Forwarding Rate	7.44 Mpps	8.93 Mpps
MAC Address Table	8k	8k
Packet Buffer Memory	512KB	512KB
Full load Power consumption	69.36 Watts	4.57 Watts
PoE Extended Mode	-	-
PD Lifeguard	-	-
Continuous PoE Power	•	•
Dimensions	170mm x 105mm x 27mm	125mm x 73.9mm x 28mm
Cloud Managed Mode	•	•
On-premises Mode	Future	Future
Standalone Mode	-	-

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