

# EnGenius Cloud

## Solution Brochure

### Visualize Your Networks with AI-driven Cloud

EnGenius Cloud is built on top of the most advanced cloud computing technology. Scalable and AI-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 AI to continuously analyze networks and report potential problems, often before issues occur.



**Quick Deployment**



**Easy Administration**



**Smart Networking**



**Visualized Insights**



## 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 dynamic allocation



### Reliability

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

Quick Deployment

# Plug & Play Auto-Provisioning

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



PLANNING SITE

1

Register devices with web or mobile app

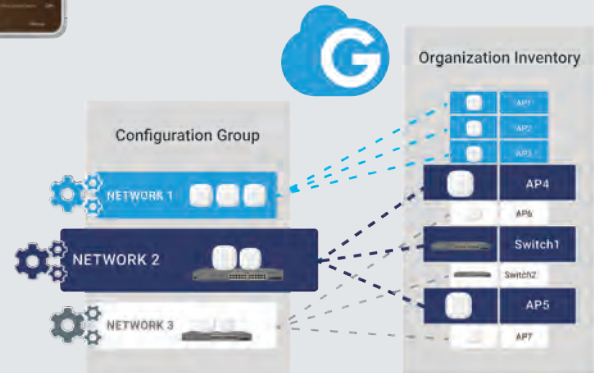
Scan a QR code with your device to register it to company inventory on the EnGenius Cloud.



2

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



DEPLOYMENT SITE

3

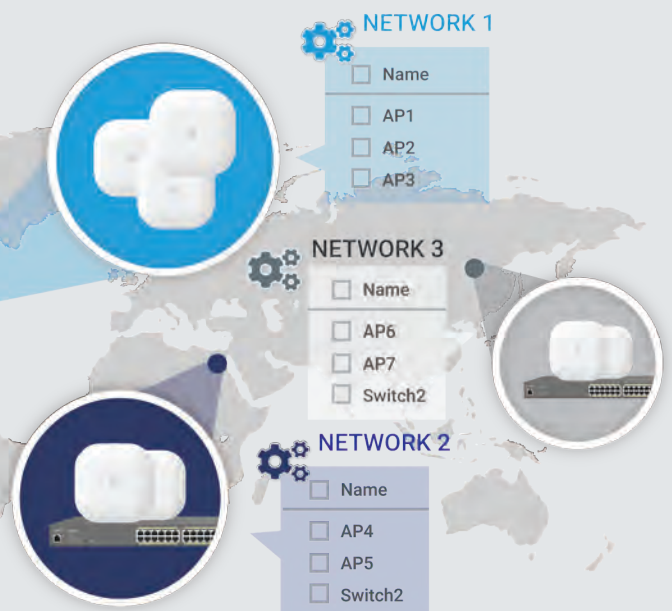
Unbox devices and connect to your network

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

4

Multiple site deployment made easy

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



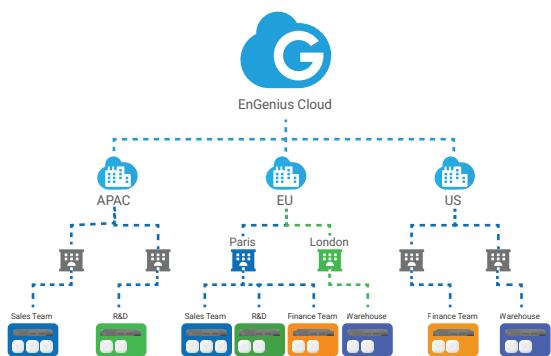
# Easy Administration

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



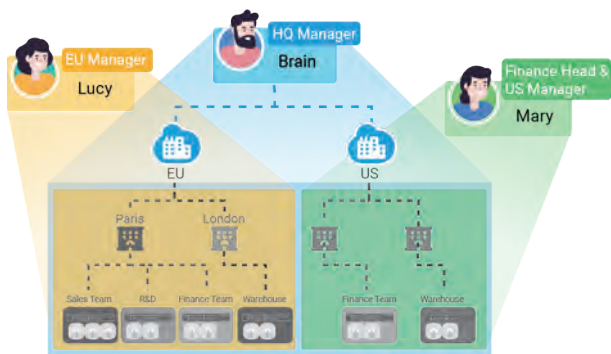
## Manage your network with hierarchy view

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.



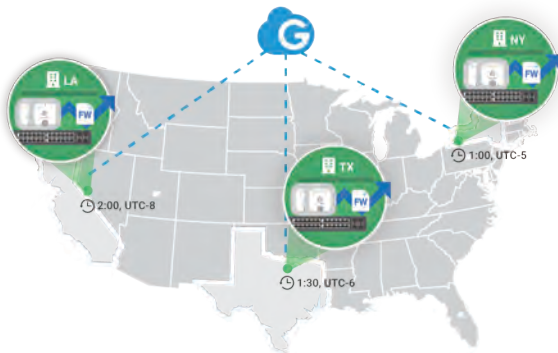
## Two factor authentication to secure your account

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.



# 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



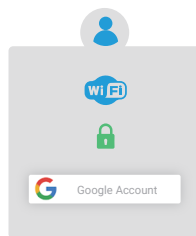
#### Custom Radius

Use local radius server for authentication



#### Voucher Service

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



#### Social Login

Login with a 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 guests.

## AP

### Block suspicious clients from your networks

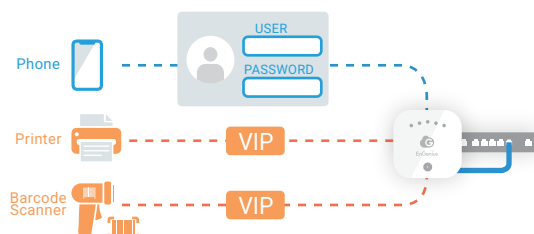
Rogue client monitoring tools allow you to deny access to your SSID for selected clients.



## 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.



## AP

### Application priority setting with one-click

By simply selecting the 'AVXpress' mode, users can effortlessly prioritize services such as video conferencing, streaming, and gaming, with the same ease as prioritizing voice calls.

## AP

### Consistent quality through Wi-Fi and wired networks

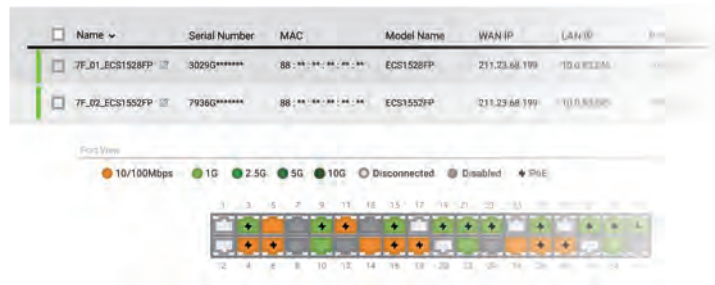
The AVXpress feature ensures that application traffic from wireless clients receives "Express" priority throughout the entire network, providing seamless prioritization from Access Points to Switches.



## Switch

### Quick view of network Switches

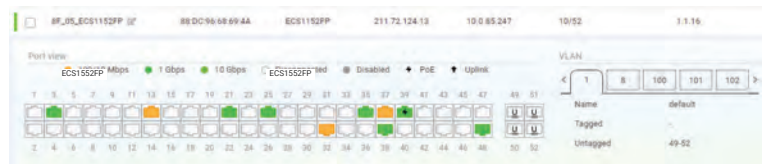
Conveniently monitor and troubleshoot all of your network switches in one location with the switch list by checking overall configurations and real-time meters.



## Switch

### Detailed view of Switch port and PoE status

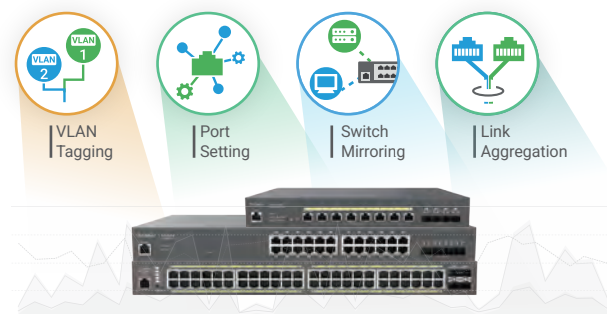
Check real-time information of port connection state and PoE utilization and make configurations for each port of individual switches.



## 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.



## 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

### Extend PoE connectivity beyond limits

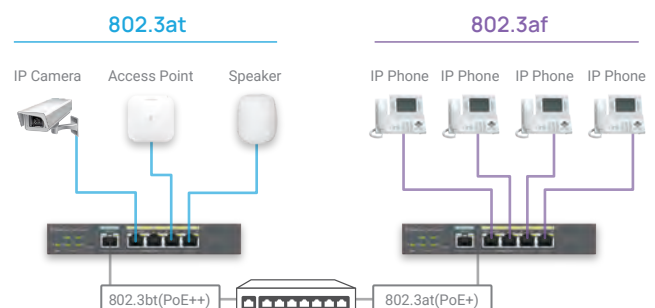
EnGenius Switch Extenders break the 100-meter PoE barrier, offering seamless, cloud-manageable connectivity for devices in hard-to-reach or maintenance-sensitive areas. Durable and reliable, they simplify network wiring and management.



## Switch Extender

### Easy powering multiple devices

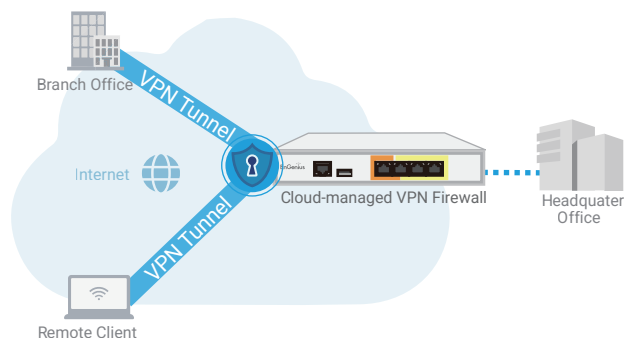
EnGenius Switch Extender powers devices efficiently in power-constrained spaces with PSE-out capability, reducing individual power wires while delivering optimized wattage for peak performance.



## VPN Firewall

### Easy setup and secure SD-WAN connections

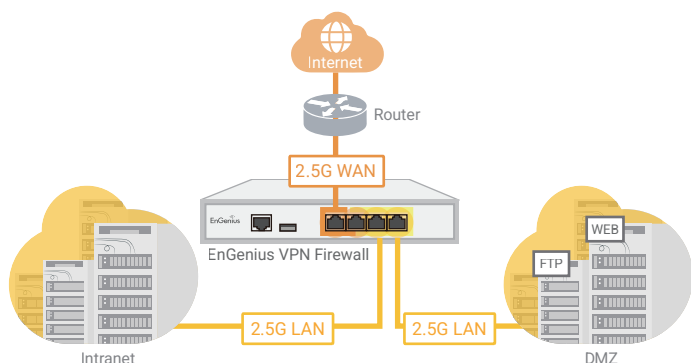
Streamline your remote work and communication with site-to-site and client VPN. Forget the complexity of traditional VPN configurations and embrace effortless, secure, and private connections for your business.



## VPN Firewall

### Optimal performance with four 2.5G ports

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



## VPN Firewall

### Self-Healing Network for Reliable Operations

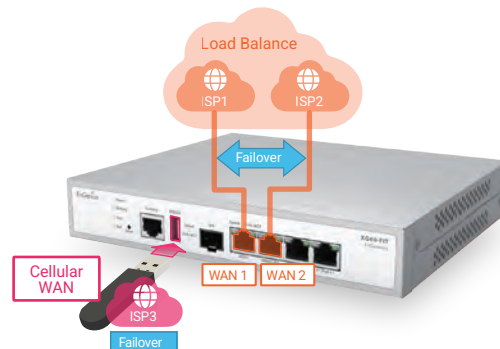
The cloud-managed devices auto-revert to a stable configuration, ensuring connectivity and minimizing downtime and support costs.



## VPN Firewall

### Stay connected with WAN failover and cellular failover

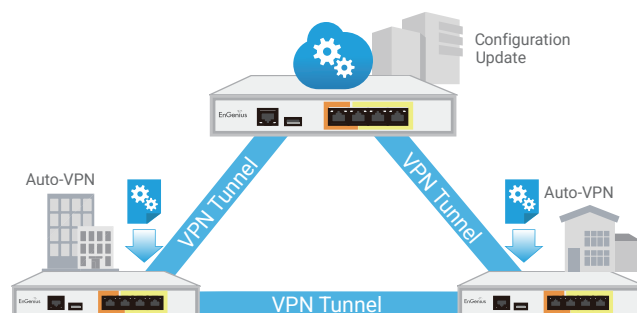
The dual WAN ports are ready for load balance to increase the WAN bandwidth or redundancy links. If all WAN ports go down, the 3G/4G network connection with the USB wireless dongle can provide a backup for the corporate network from disruption.



## VPN Firewall

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

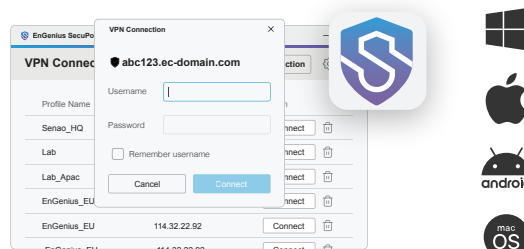
EnGenius VPN Firewalls will automatically update related VPN information to all peers for continuous VPN connection in the case of WAN IP address reassignment or forwarding port change.



## VPN Firewall

### 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

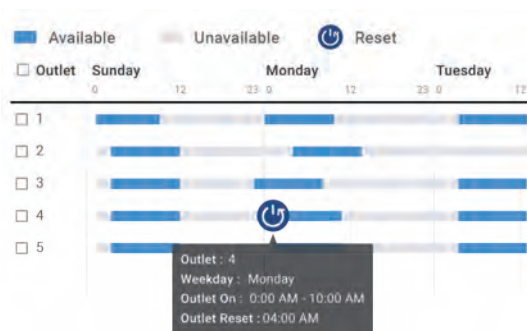
Obtain comprehensive real-time data and power usage statistics for each PDU outlet's current, voltage, and kWh usage, empowering you to optimize power consumption effectively.



PDU

### Individual outlet scheduling

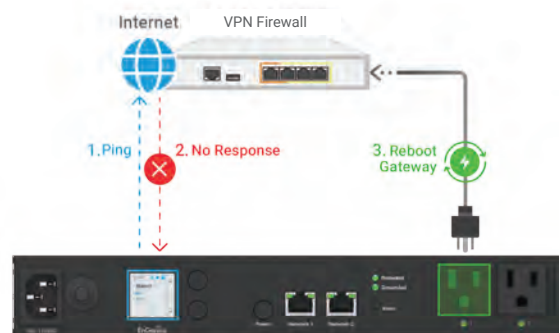
The PDU enables individual outlet scheduling, improving energy management. Users can customize outlet operations, optimizing power use and efficiency.



PDU

### Self-healing Auto-reboot

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



PDU

### AI-driven Hyperview dashboard

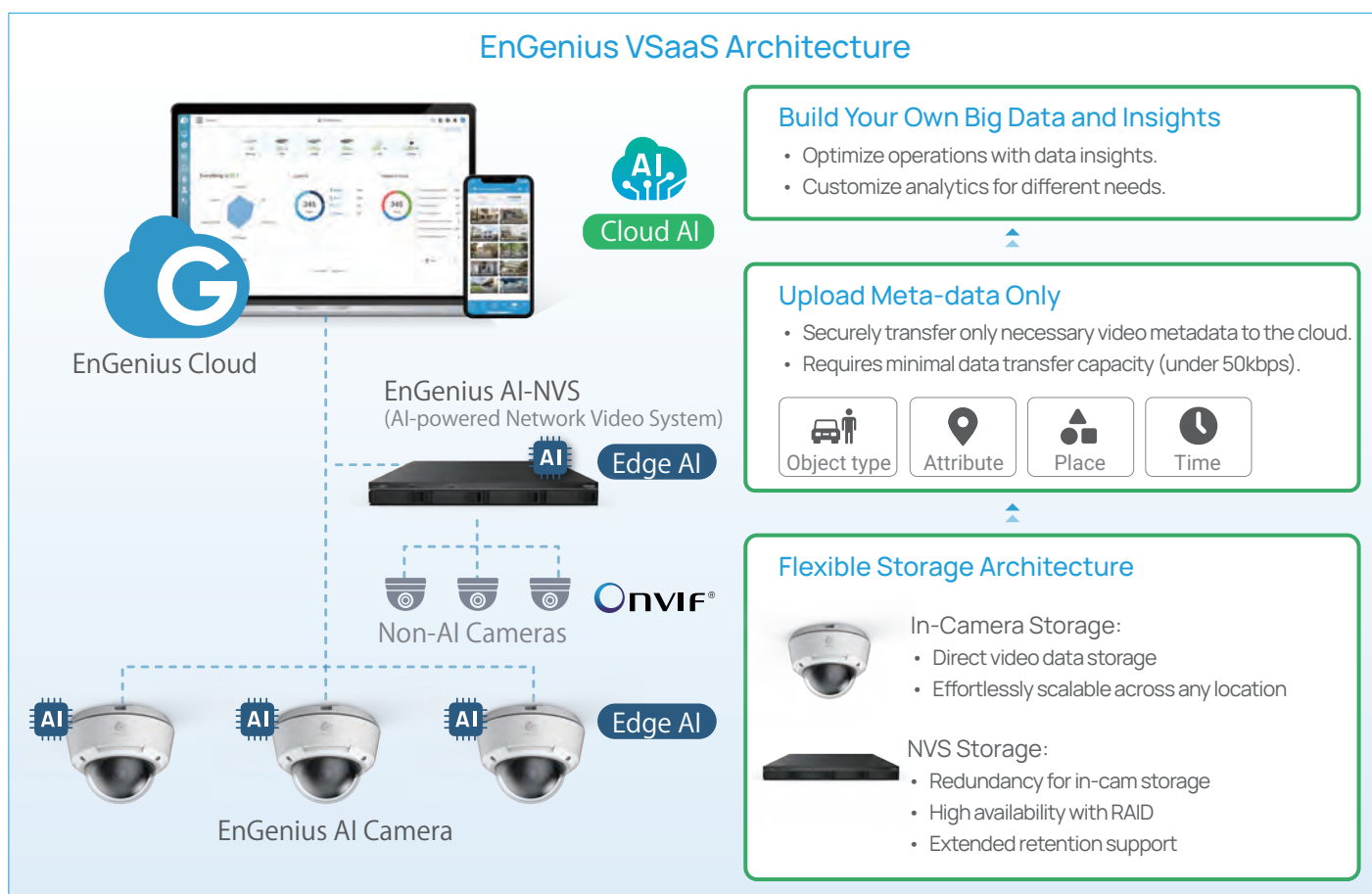
EnGenius Hyperview dashboard with AI-driven analytics and visualization offers a user-friendly interface for monitoring real-time power metrics while displaying electricity costs to enhance budget management.



## Camera

### EnGenius AI Cloud Surveillance Solution

EnGenius AI Cloud Surveillance Solution revolutionizes security monitoring by integrating edge AI processing with contextual cloud analytics. Our solution replaces traditional NVR infrastructure with AI cloud cameras featuring built-in storage with local AI processing and real-time detection. To support diverse surveillance needs, our AI-powered Network Video System (NVS) extends sophisticated AI capabilities to any ONVIF-compatible cameras while providing enterprise-grade RAID storage. The EnGenius Cloud platform unifies management of all cameras - both EnGenius and NVS-connected ONVIF cameras - providing intelligent context recognition through a single, scalable platform.



## Edge AI

### The Camera That Thinks

EnGenius Edge AI cameras, with built-in NPU processors, convert bulky video into streamlined metadata, performing instant object detection and recognition right at the source—no bandwidth strain, just smart security.



#### AI Cloud Analytics

Multimodal LLM-powered analysis recognizes complex scenarios and behaviors and enables intuitive search across all cameras.



#### No NVR Required

Our AI cameras feature built-in storage, providing instant footage access and eliminating the need for costly NVR infrastructure.



#### Edge AI Computing

Built-in NPU enables real-time detection, converting video into lightweight metadata that streams efficiently to the cloud.



#### ONVIF AI Upgrade for Any Camera

Add contextual AI capabilities to non-EnGenius (ONVIF) cameras while connecting the system to the EnGenius Cloud for unified management and protect video data with reliable RAID storage.

## Intelligent Surveillance: From Detection to Understanding



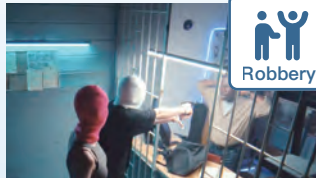
Cloud AI

### AI-Powered Context Recognition

Our AI-powered surveillance solution leverages advanced Multimodal LLM technology to understand complex security scenarios in real-time. Moving beyond traditional detection, the system comprehends human interactions and behavioral patterns, automatically identifying critical events such as physical conflicts, unauthorized activities, traffic incidents, and crowd management concerns. This intelligent contextual recognition enables proactive response to potential security threats before they escalate.



Two masked persons aim a gun at the man behind the counter



Man behind the counter raising both hands



A boy in a blue sweater grabs the other's shirt



A boy with a red backpack is pushed against a wall



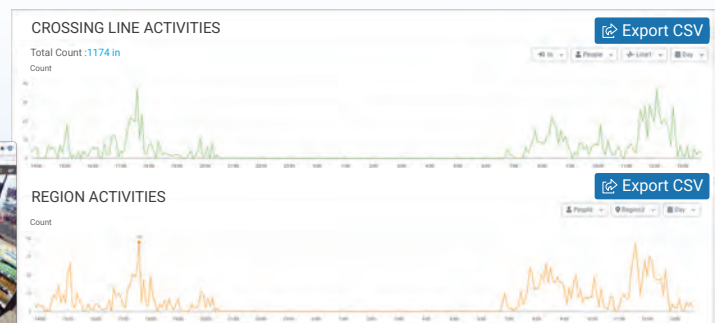
Edge AI

### Business Intelligence Analytics

#### People and Vehicle Counting

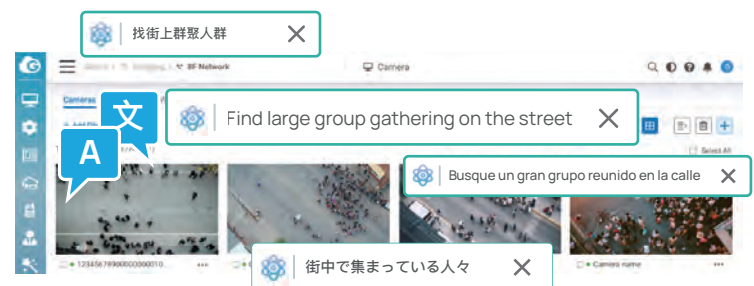
Track precise visitor flows and vehicle patterns through ROI-based detection/ cross-line counting, enabling applications such as:

- Peak hour analysis
- Parking optimization
- Entry/ Exit Patterns



### Intuitive Natural Language Search

Transform video search with AI-powered natural language processing. Simply type queries like "person wearing red jacket near entrance" or "group gathering in parking lot," and the system instantly locates relevant footage across your entire network. This natural language search capability is available across multiple languages.



### Intelligent Alert & Notification

Our comprehensive security solution delivers two levels of AI-powered alerts, combining immediate threat detection with sophisticated contextual analysis.

#### Edge-AI Camera Alerts

Rule-based detection monitors intrusions, line crossing, crowd density with counting, object detection, and camera tampering.



#### Cloud-AI Alerts

Instantly alerts you to critical scenarios like fights, bullying, accidents, and weapon detection through AI-powered behavioral analysis.



## Contextual SD Alert: Customer-Defined Context Alert

While predefined AI alerts handle common scenarios like fights and arson, every organization faces unique operational challenges requiring customized detection beyond standard alerts.

EnGenius goes beyond conventional predefined alerts by introducing Contextual SD-Alert—empowering you to create intelligent, industry-specific detection tailored to your exact operational needs.

### Your Security, Your Rules

#### ✓ Customize Your Own Alerts Using Natural Language

##### SD-Alert

Person making physical contact with child

Enter

- No Code / No Retraining
- No Hardware Dependencies
- No Software Installation
- Multi-language supports

#### ✓ Smarter alerts built on Contextual Intelligence

Leverages cloud-based LLM agents to trigger alerts based on complete behavioral patterns and sequences, preventing alerts from irrelevant movements or partial activities

#### ✓ Teach Your AI What Matters: User-Defined Contextual Intelligence

Train your AI with site-specific knowledge to make smarter decisions. Define what's normal for your environment:

#### ✓ Address Specific & Unique Needs across Diverse Industries

! Taking photos in restricted area



! Person not wearing hardhat



! Perform dangerous bicycle tricks



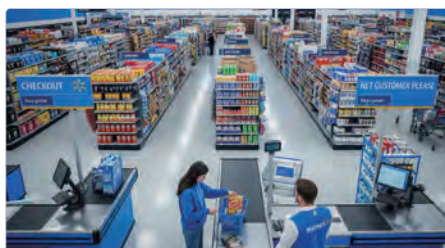
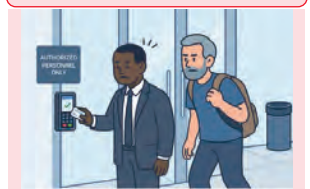
! Caregiver hitting patient



! Teacher making a violent gesture



! Tailgate without access card



#### 📋 User Entry Scene Description

Staff Uniform Features

- The person wearing a blue vest with the supermarket logo is a clerk.

Normal Behaviors

- Umbrellas and water bottles should not be classified as weapons.

Special Notes

- If over 4 people queue, note number of people.

## How SD-Alert Works

### Define Alert Condition

#### SD-Alert

Someone performs .....

Enter

Setting alert condition by **Natural Language**, like:

*"Someone performs dangerous stunts on a bicycle in the park"*

### Analyze with Cloud AI

Cloud AI



Cloud AI analyzes & recognizes:

- High-speed riding
- Standing actions
- No-hands cycling
- Jumping curbs

### Detect Across Cameras



Cyclist riding down public stairway at high speed.



A person performing a stunt on a bicycle, specifically standing on the seat while riding.

Cam 1

Cam 2

It can detect events **across different cameras** and send pro-active alerts.

## Multi-Face Recognition & Cross-Camera Tracking

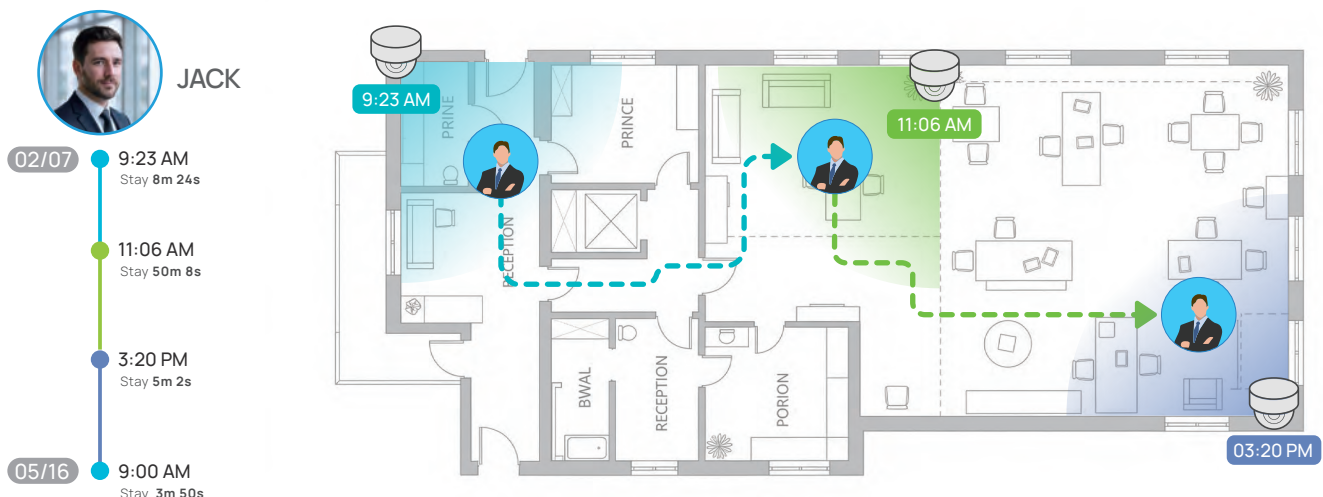
### Multi-Person Simultaneous Face Recognition

Unlike systems that can only scan one person at a time, the ECC500 can recognize multiple faces at once—even in busy lobbies or crowded retail spaces.



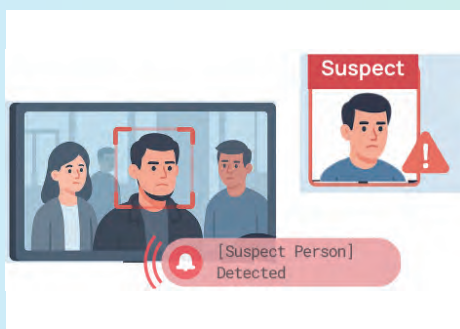
### Visual Timeline Tracking

With EnGenius AI Cameras, you can follow someone's path across your entire coverage area in one simple timeline. See exactly when and where they showed up, check what they were doing at each spot, and pull up video clips or snapshots instantly. Need a report? Export a complete tracking summary in seconds—turning what used to take hours of video review into just minutes.



### Real-Time Face Recognition with Instant Alerts

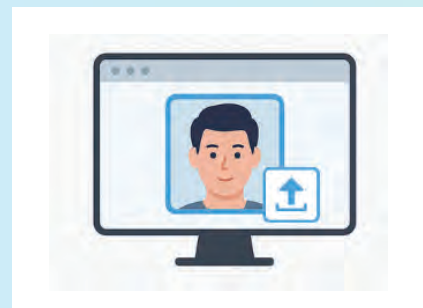
Get immediate notifications when persons of interest or tagged individuals are detected through edge AI processing, ensuring instant response times.



### Seamless Face Search via Photo or Footage

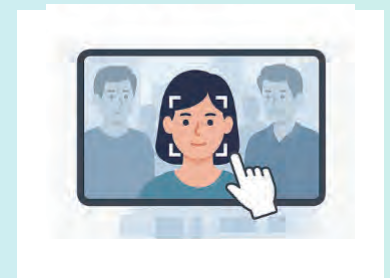
#### Upload Photo Search

Just upload a photo, and the system will instantly find that person across every camera. It's a quick, powerful way to track down missing individuals or identify suspects.



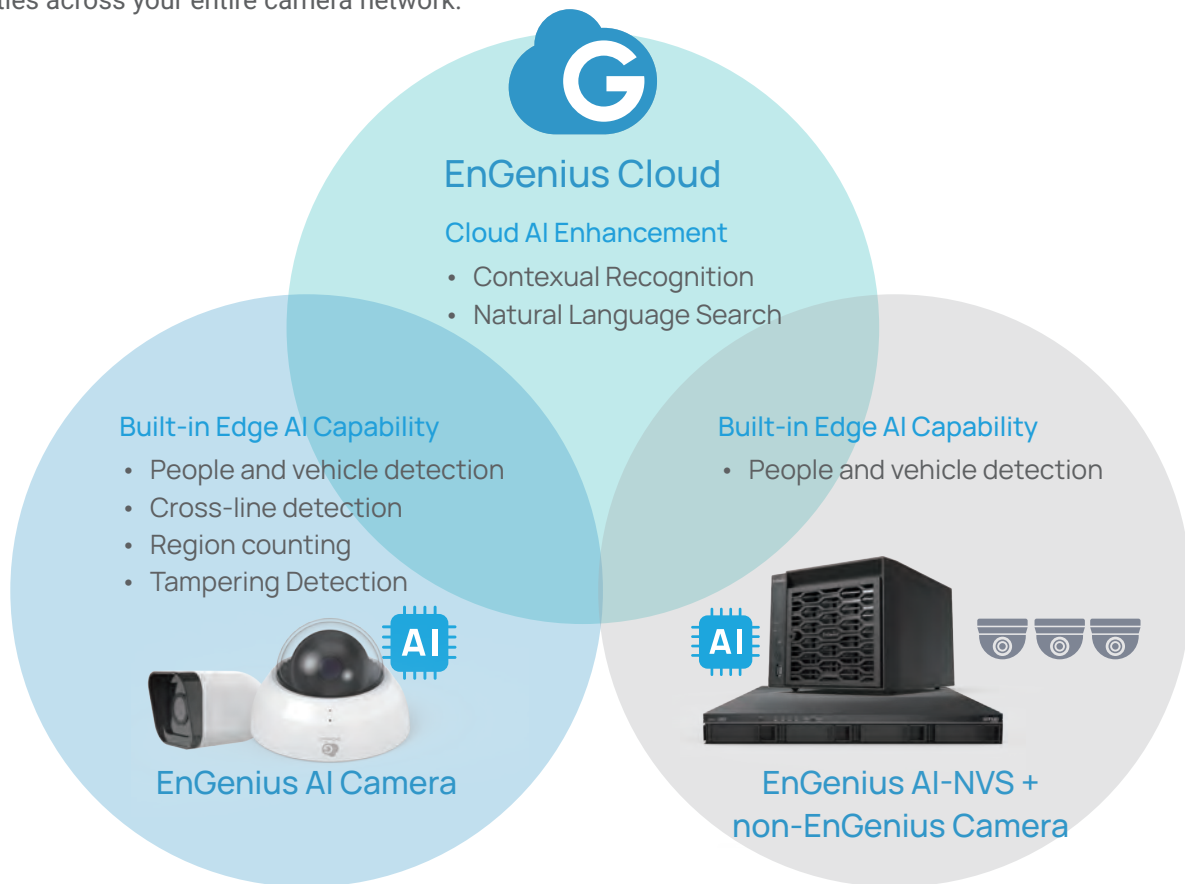
#### Select Face from Footage

See someone in the footage? Just click their face to instantly pull up every time they've appeared across your cameras—making investigations faster and easier.



## AI Versatility at the Edge: From EnGenius AI Camera to Any Camera

Deploy intelligence your way - through EnGenius AI cameras with built-in processing or NVS-enabled AI for existing non-EnGenius cameras. Our flexible architecture adapts to your surveillance needs while ensuring consistent AI capabilities across your entire camera network.



EnGenius AI Cameras Transform surveillance with intelligent cameras featuring:



### Intelligent Design

- Built-in NPU for edge AI processing
- Up to 512GB built-in storage for local recording



### Professional Imaging

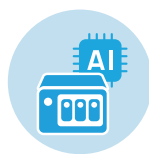
- Up to 8MP (4K) resolution
- Advanced Sony STARVIS sensor for superior low-light performance
- Up to 30m IR illumination range



### Easy Deployment & Durability

- PoE-powered for simple installation
- IP66/67 weatherproof protection
- IK10 vandal resistance
- NDAA/TAA compliant

AI-powered Network Video System (NVS) Extend AI capabilities to your existing non-EnGenius cameras:



### AI Enhancement for Any Camera

- Transforms ONVIF cameras with advanced AI capabilities
- NPU-powered processing for real-time detection
- Accurate and proactive alerts



### Enterprise-Grade Storage

- High-availability RAID protection
- Extended recording capacity for 30+ days
- Continuous 24/7 operation reliability



### Unified Management Platform

- Seamless integration with EnGenius Cloud
- Centralized control of multi-brand cameras
- Complete ecosystem integration with EnGenius networking devices

# 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](http://www.engenius.ai/cloud)



## Visualize Your Networks with AI-driven Cloud

Network Health Center

Counseling Floor Plan

Client Network Timeline

Device Real-Time Diagnostics

AI-Driven Advisory Board

Topology View

Historical Network Traffic

Layer-7 Apps Dashboard

Management On-the-Go

Captive Portal

Mesh Technology

[engenius.ai/cloud](http://engenius.ai/cloud)

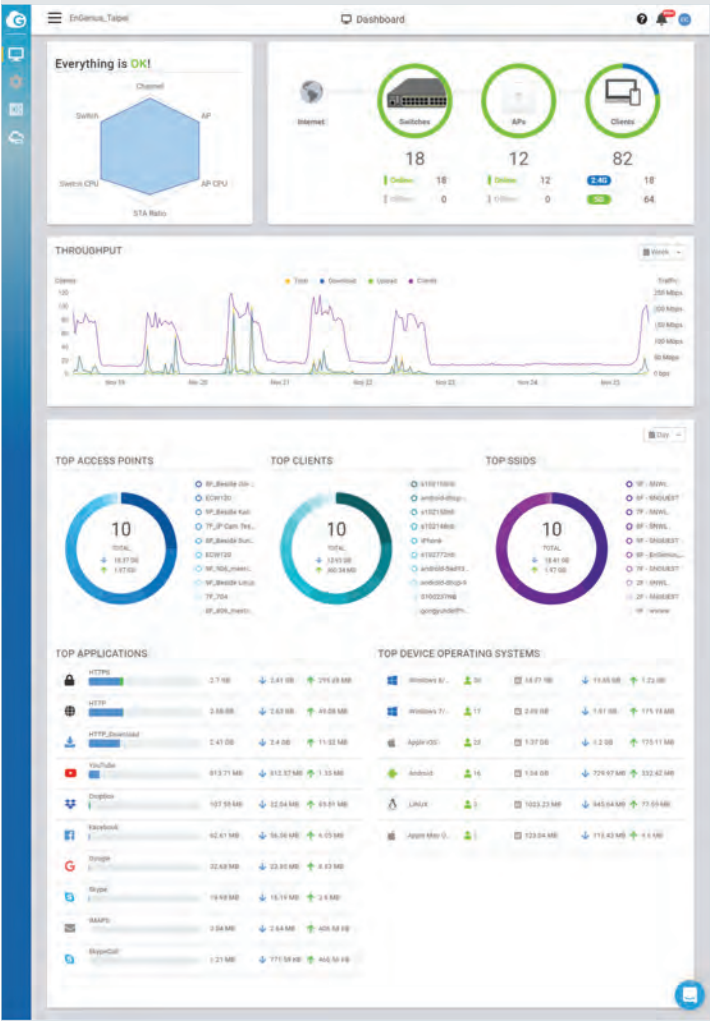
# Visualized Insights

## 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 AI-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.



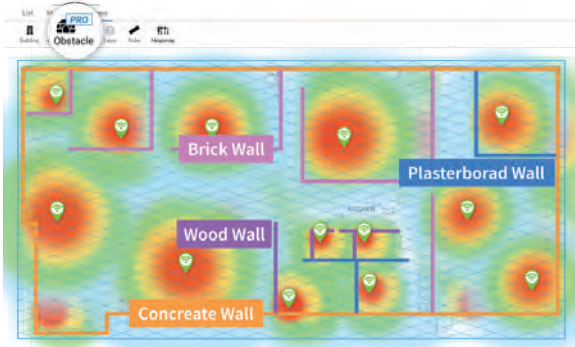
### Quickly Identify Potential Issues with Smart Network Insights

Monitor throughput and channel utilization in real-time. Instantly spot issues and take action to optimize performance without delay.

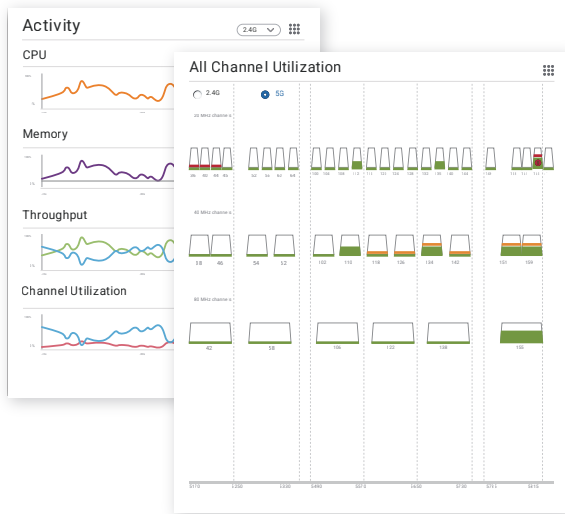


### Wi-Fi planner calculates optimal AP placement and signal strength on your floor plan

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.



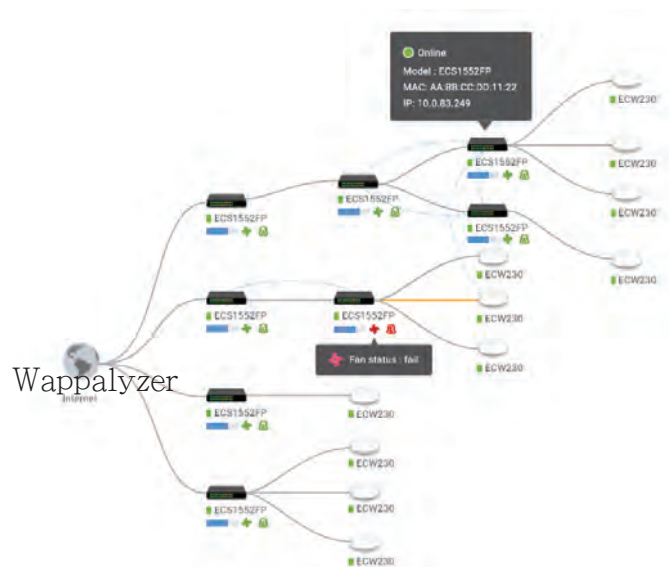
## Supervise devices with real-time metrics

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

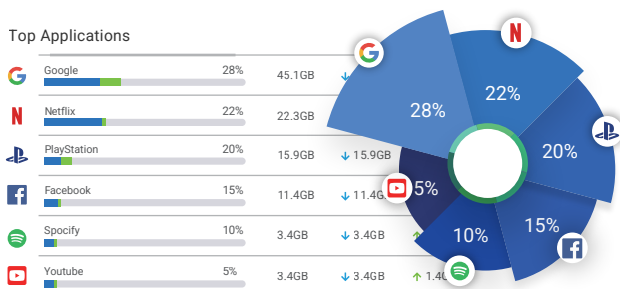
The topology view displays all the devices managed by EnGenius Cloud and the relationships between network devices. You can see the real-time status of Access Points and switches and check the detailed information of PoE status, IP and MAC address, and throughput.

- 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.



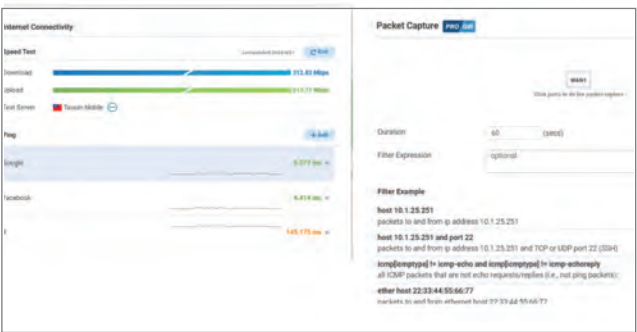
## Diagnostic & Advisory

# Comprehensive and Real-time Support Tools

EnGenius Cloud ensures reliable network performance with AI chat support, remote assistance, and advanced diagnostics, empowering efficient management across industries.

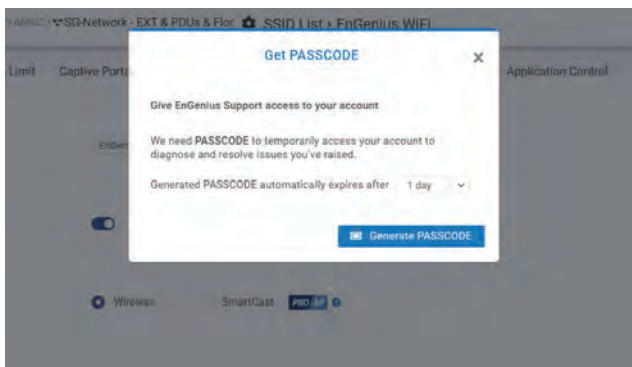
### Advanced network diagnostics for optimal performance

EnGenius offers tools like speed tests, ping monitoring, and Pro-level packet capture for efficient troubleshooting and performance analysis, ensuring reliable connectivity.



### Secure and temporary support access

EnGenius ensures secure troubleshooting with a passcode system that grants temporary access to your account. This feature allows support teams to diagnose and resolve issues efficiently, with passcodes automatically expiring after a set duration, ensuring your account remains protected at all times.



### On-line chat bot with AI support

Manage Your networks effortlessly with the EnGenius cloud interface and AI-powered support, providing quick setup, troubleshooting, and advanced features like SmartCast and Hotspot 2.0.



### Tailored solutions for industry-specific needs

EnGenius Cloud delivers tailored solutions to optimize network efficiency across industries like retail, hospitality, and education. Explore best practices to enhance connectivity and streamline operations.



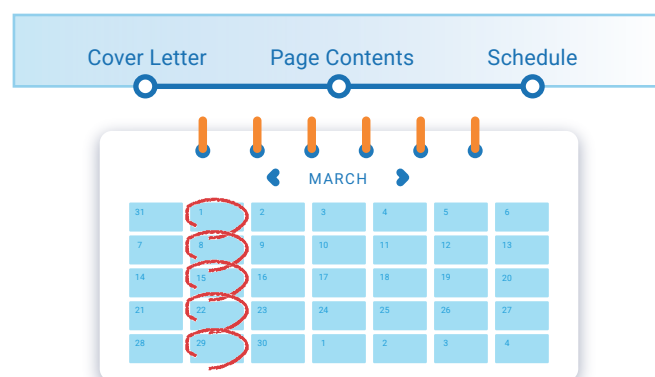


# Empower Your Networking with Professional Features

## Scheduling Report

Customize and schedule network reports in minutes

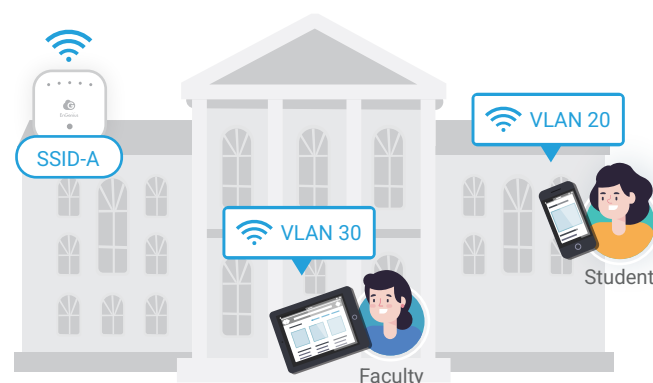
For MSPs to provide regular reports to customers and MIS to continuously track network status, Scheduling Report allows users to generate reports regularly and email to designated persons with customized content, including logo, sender, and selected dashboards.



## Per-user VLAN

User-based VLAN to keep your access privilege within network

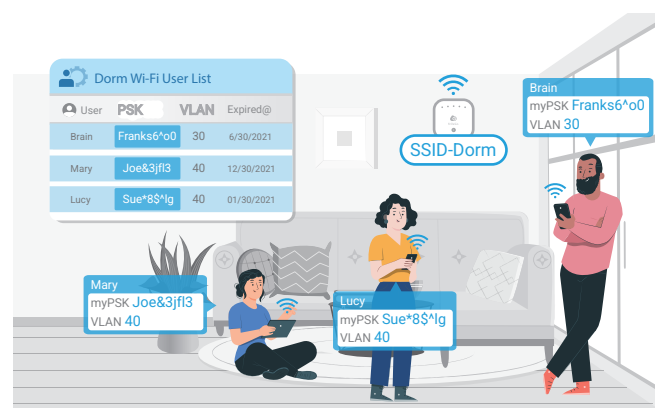
Each client can be assigned to a VLAN to access different network resources even under the same SSID and remain the same VLAN across the network, regardless of the SSID with which they are associated. For example, faculty and students accessing the same SSID will be assigned to different VLANs.



## myPSK

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

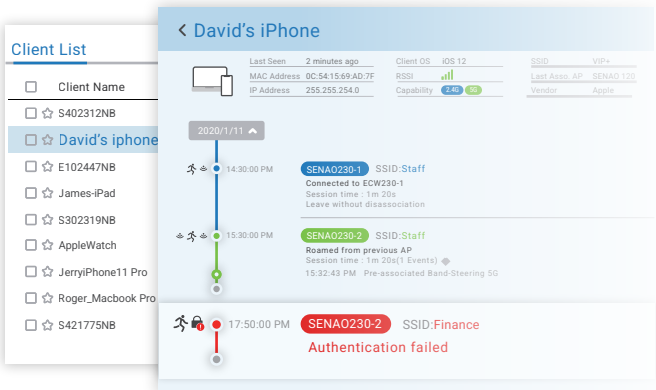
When accessing the same SSID, each tenant will have a unique PSK and be associated with different VLAN tags based on the privilege. In the case of dormitory Wi-Fi management, when a user's unique myPSK expires along with his stay, he or she will no longer be able to access the Wi-Fi network.



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

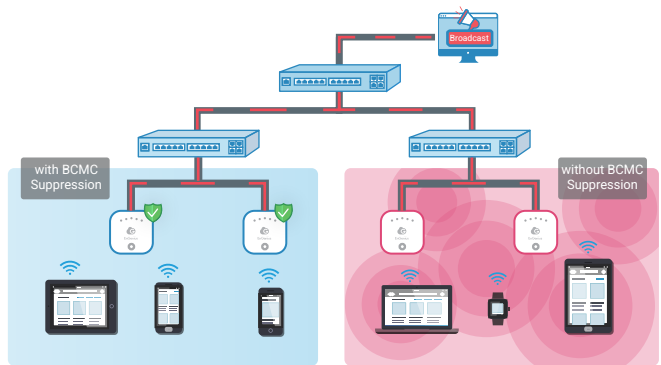
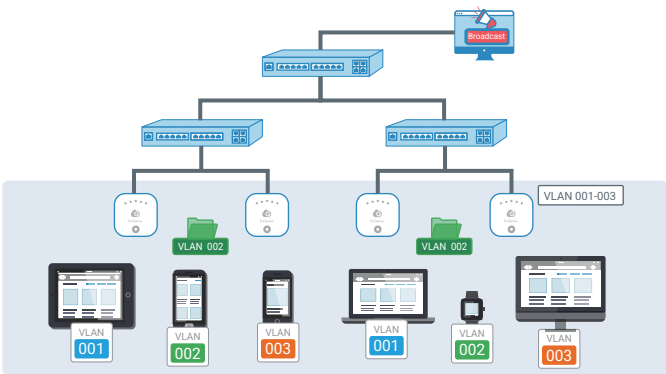
Easy Cloud authentication and voucher services

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

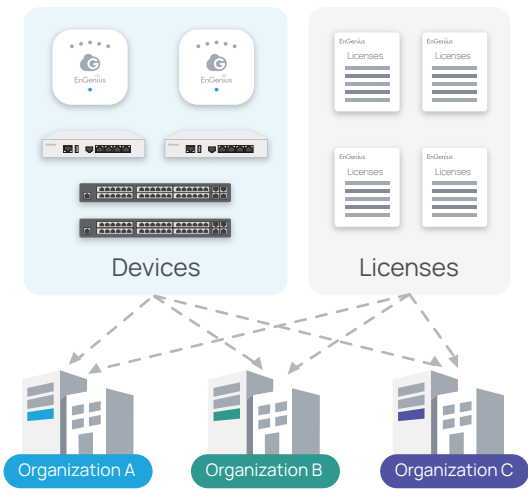
Optimize broadcast and multicast traffic for Wi-Fi networks

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.

### MSP Portal

Single Dashboard to see everything and miss nothing

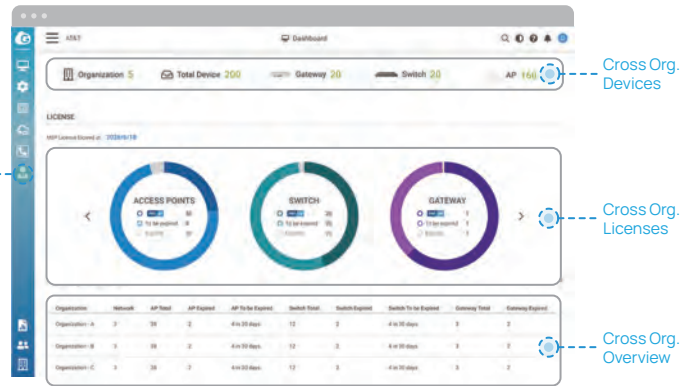
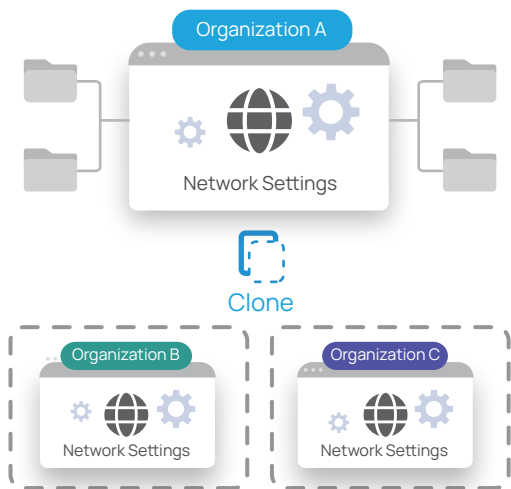
Gain a centralized, holistic view for comprehensive oversight and control across multiple tenants (organizations). The MSP Portal efficiently scale and manage customer networks from a single dashboard.



### MSP Portal

Simplified team management across multiple organizations

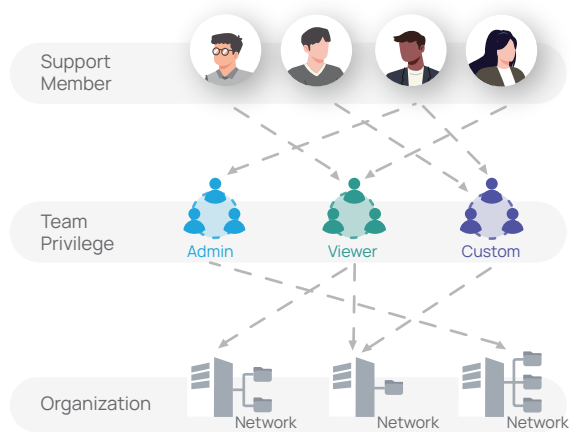
With simplified team privileges, MSP administrators can assign access rights to entire teams instead of individual users. Effortless team modifications ensure that when changes occur within a team, updating the team list automatically adjusts access rights across all associated organizations or networks, maintaining consistent permissions throughout.



### MSP Portal

Unified inventory & licensing for efficient management

Our platform provides a one-stop management solution for MSP administrators, offering centralized control over device and license registration. This facilitates seamless device relocation and ensures proactive inventory control, including comprehensive tracking of upcoming license expirations for optimal visibility.



### MSP Portal

Clone to deploy for easy setup in minutes

The 'Clone' feature enables the smart copy of configurations from specific Organizations and Networks, significantly reducing setup times and eliminating repetitive configurations. This streamlines the launch of new Organizations and Networks by minimizing redundant settings for similar tenants, unleashing efficiency in deployment processes.

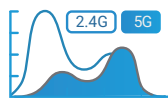


# Counter the Risk of Wireless Threats with EnGenius Security Access Points

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



AirGuard WIPS/WIDS



Spectrum Analysis



Zero-wait DFS



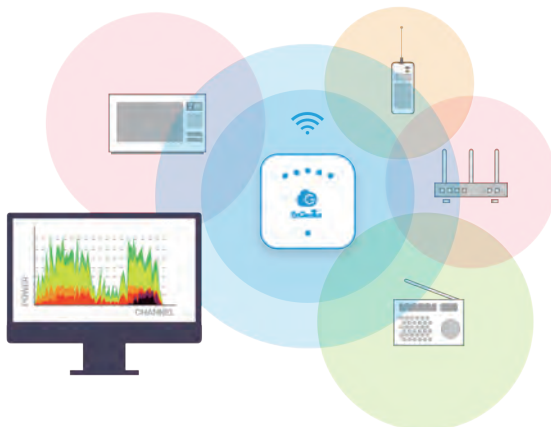
BLE Capability

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 rogue 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

Zero-Wait DFS to avoid disrupting client 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.



## Wi-Fi 7

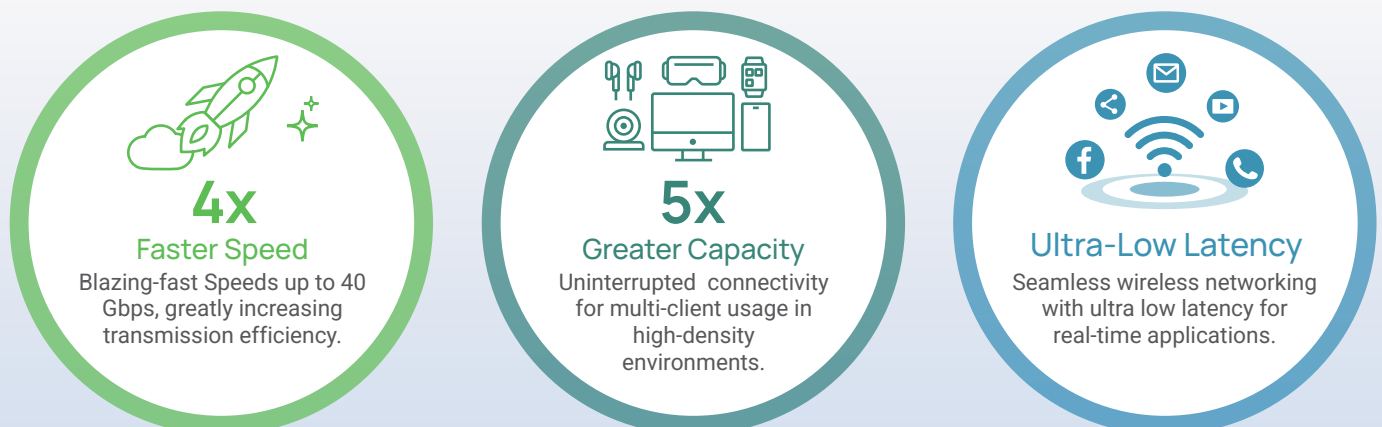
# Next-Generation Wi-Fi With Blazing-Fast Speed, Greater Capacity, and Ultra-Low Latency.

## 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

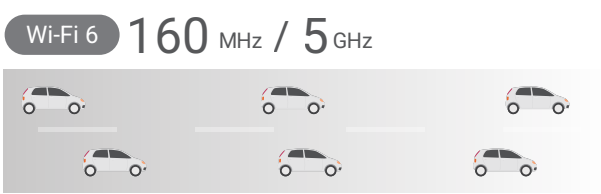
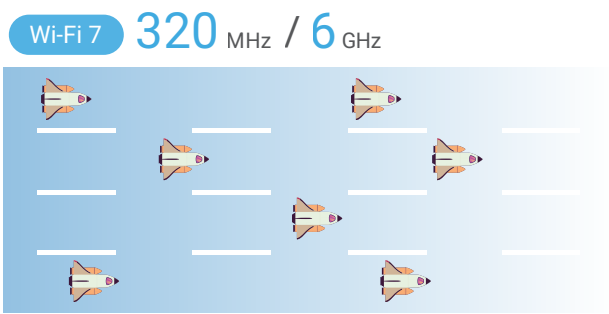


# Innovative Features of Wi-Fi 7

## 2X Wider Bandwidth

320 MHz in 6 GHz band

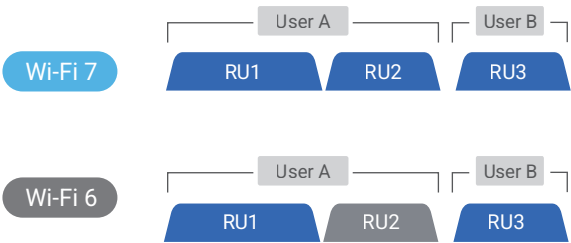
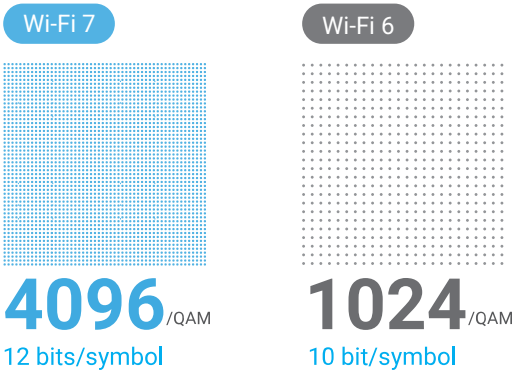
The three 320 MHz channels Unlock the full potential of the 6 GHz bands with Wi-Fi 7, eliminating bottlenecks and boosting productivity. Get more transmission done in less time for faster speed.



## 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

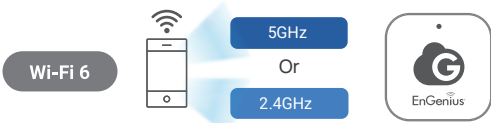
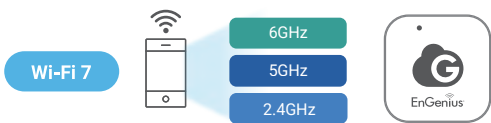
Multi-RU & Puncturing

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

### INDUSTRIAL IOT

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.



## Smart Life

### 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.



# Deploy and Monitor Your Networks On the Go



## EnGenius Cloud To-Go

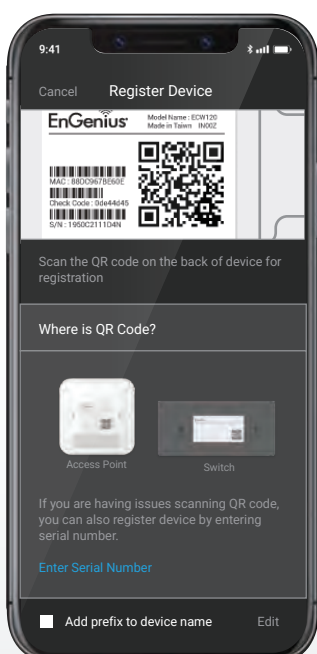
Smart Networking at Your Fingertips

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



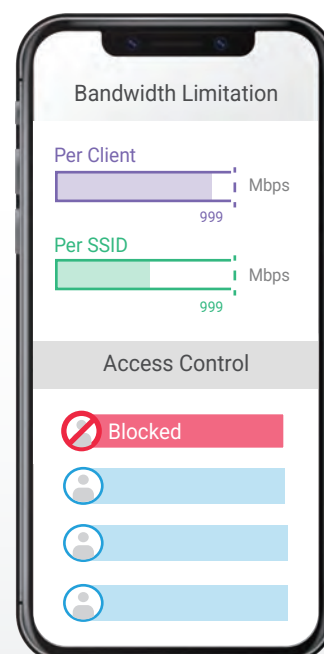
### Simple monitoring and management

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 you 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 step-by-step guidelines of the app to quickly set-up your cloud-managed devices.

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

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 well-protected 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, VPN Firewall, PDU and Extender.

	<div>Basic</div> Basic Plan	<div>PRO</div> Professional Plan	
	For SOHO, SMB, and fast-growing retail and hospitality to manage networks in a simple way	For SMEs, managed service providers and networks required more advanced features	
Cloud License Price	FREE (no license needed)	<div>\$</div> Require Cloud PRO License	
Platform-wide			
Cloud Network Management	Easy Administration	Smart Networking	Visualized Insights
	Quick deployment with QR-code scan	Quick access to device live view	Network dashboard
	Hierarchy view & multi-tenant design	Variety of user authentications	AI-driven advisory board
	Two factor authentication	Custom splash page	Device real-time metrics
	Schedule firmware upgrade	Block/ VIPed client	Usage of Layer 7 applications
Team Members	10 users	Unlimited	
Max Network no. in an Org	50	5000 (Recommend 500)	
Cloud Radius and Voucher Service	100 entries	10000 entries	
Clone Network	-	V	
Client List Export	-	V	
Topology	EnGenius devices only	EnGenius and 3rd-party devices	
Scheduling Report System	1 report	V	
Customer Support	Limited support	Priority support with on-line tool	
<div>PRO AP</div> Access Point			
Statistic Data Stored	1 day	30 days	
Client Timeline	-	V	
Wi-Fi Floor Plan Heatmap	V	V	
Wi-Fi Floor (Obstacle & Virtual AP)	-	V	
WiFi Floor Plan Counsel *	-	V	
myPSK (dynamic/ private PSK)	-	V	
VLAN Pooling	-	V	
Broadcast Suppression	V	V	
Application QoS (AVXpress)	V	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/ Whitelist	100	1000	
Change Log	V	V	
Alert Notification	On-line/ Off-line	V	
Backup & Restore	-	V	
API Integration (3rd party)	-	V	

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

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	Hierarchy view & multi-tenant design	Variety of user authentications	AI-driven advisory board
	Two factor authentication	Custom splash page	Device real-time metrics
	Schedule firmware upgrade	Block/ VIPed client	Usage of Layer 7 applications
<div>PRO SW</div> Switch			
Statistic Data Stored	1 day	30 days	
Switch Template (Port Configuration)	—	V	
Real-time Wired Client List	—	V	
PD Lifeguard	V	V	
Auto Cam Lifeguard	—	V	
Extended Range	V	V	
Packet Capture (.pcap)	—	V	
Diag Tools	Limited	Full / real-time client	
Change Log	V	V (More Details)	
Alert Notification	On-line/ Off-line	V	
Backup & Restore	—	V	
API Integration (3rd party)	—	V	
<div>PRO GW</div> VPN Firewall			
Statistic Data Stored	1 day	30 days	
Auto VPN	V	V	
Auto VPN NAT Traversal	—	V	
Auto VPN Fail-over	—	V	
VPN Topology	—	V	
VPN Traffic Usage	—	V	
VPN Client (IPsec)	V	V	
Network Clone	—	V	
Firewall State/ Session Log for Diag	—	V	
Remote CLI	—	V	
Diag Tools	V	V	
Packet Capture	—	V	
Policy Route	V	V	
Change Log	V	V (More Details)	
Alert Notification	On-line/ Off-line	V	
Backup & Restore	—	V	
API Integration (3rd party)	—	V	

# 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, VPN Firewall, PDU and Extender.

	<div>Basic</div> <div>Basic Plan</div> <div>For SOHO, SMB, and fast-growing retail and hospitality to manage networks in a simple way</div>	<div>PRO</div> <div>Professional Plan</div> <div>For SMEs, managed service providers and networks required more advanced features</div>
Cloud License Price	FREE (no license needed)	<div>\$</div> Require Cloud PRO License
<div>PRO</div> <div>PDU</div> <div>PDU</div>		
Statistic Data Stored	1 day	30 days
Change Log	V	V
Alert Notification	On-Off only	Advanced
Backup & Restore	—	V
API Integration (3rd Party)	—	V
<div>PRO</div> <div>EXT</div> <div>Switch Extender</div>		
Statistic Data Stored	—	30 days
Change Log	—	V
Alert Notification	—	V
Backup & Restore	—	V

## ECW Lite Feature Comparison

Access Point	ECW Lite - Basic Plan	ECW Lite - Professional Plan
Statistic Data Storage	1 Day	30 Days
Cloud Radius and Voucher Service	100	100
Change Log	V	V
Alert Notification	On-line/Off-line	On-line/Off-line
Backup & Restore	-	V
Clone Network	-	V
Client List Export	-	V
Topology	V	V
API Integration (3rd party)	-	V
Broadcast Suppression	V	V
Application QoS(AVXpress)	V	V
Live Diag Tools	Limited	Limited
Live Client List	-	V
VIP/Allowlist/Block List	100	100

\*ECW-Lite AP models don't support other Pro features if not listed in the above table.






## Basic Plan Comparison of ECW and ECW Lite

Access Point	ECW Lite - Basic Plan	ECW Lite - Professional Plan
Hotspot 2.0	V	-
RadSec	V	-
VLAN by RADIUS	V	-
Other Basic Plan Features*	V	V






\*Except the three features above, ECW Lite Access Points support all the rest features as ECW ones in the Basic Plan.




# Cloud - Access Points

Indoor					
					
Model Name	Cloud5 2x2	Cloud5 4x4	Cloud6 2x2 Wallplate	Cloud6 2x2	Cloud6 2x2 S
Model Number	ECW120	ECW130	ECW215	ECW220	ECW220S
Wi-Fi Standard	11ac Wave 2	11ac Wave 2	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
Data Rate (2.4 GHz)	400 Mbps	800 Mbps	600 Mbps	600 Mbps	600 Mbps
Data Rate (5 GHz)	867 Mbps	1800 Mbps	1200 Mbps	1200 Mbps	1200 Mbps
Data Rate (6 GHz)	-	-	-	-	-
Radio Chains	2 x 2:2	4 x 4:4	2 x 2:2	2 x 2:2	2 x 2:2
Tx Power (2.4 GHz)	23 dBm	25 dBm	20 dBm	22 dBm	22 dBm
Tx Power (5 GHz)	23 dBm	24 dBm	20 dBm	22 dBm	22 dBm
Tx Power (6 GHz)	-	-	-	-	-
Antennas (2.4 GHz)	2 x 5 dBi Omni	4 x 4 dBi Omni	2 x 4 dBi Omni	2 x 4 dBi Omni	2 x 4 dBi Omni
Antennas (5 GHz)	2 x 5 dBi Omni	4 x 6 dBi Omni	2 x 5 dBi Omni	2 x 5 dBi Omni	2 x 5 dBi Omni
Antennas (6 GHz)	-	-	-	-	-
PoE Standard	802.3af	802.3at	802.3af/at	802.3af/at	802.3af/at
Scanning Radio	-	-	-	-	●
BLE	-	-	-	-	●
Power Consumption (Peak)	12W	19.1W	14.2W	12.8W	12.8W
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
Mounting	Wall/ Ceiling	Wall/Ceiling	Wall	Wall/ Ceiling	Wall/ Ceiling
IP Rating	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
Mesh Technology	●	●	●	●	●
Mobile app (Cloud To-Go)	●	●	●	●	●


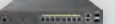



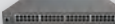
Indoor					
					
Model Name	Cloud6 4x4	Cloud6 4x4 S	Cloud6E 4x4x4	Cloud7 2x2x2	Cloud7 4x4x4
Model Number	ECW230	ECW230S	ECW336	ECW526	ECW536
Wi-Fi Standard	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)	Wi-Fi 6E (11ax)	Wi-Fi 7 (11be)	Wi-Fi 7 (11be)
Frequency	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz & 6 GHz	2.4 GHz & 5 GHz & 6 GHz	2.4 GHz & 5 GHz & 6 GHz
Data Rate (2.4 GHz)	1200 Mbps	1200 Mbps	1,200 Mbps	700 Mbps	1,400 Mbps
Data Rate (5 GHz)	2400 Mbps	2400 Mbps	2,400 Mbps	2,900 Mbps	5,800 Mbps
Data Rate (6 GHz)	-	-	4,800 Mbps	5,800 Mbps	11,600 Mbps
Radio Chains	4 x 4:4	4 x 4:4	4 x 4:4	2 x 2:2	4 x 4:4
Tx Power (2.4 GHz)	23 dBm	23 dBm	23 dBm	23 dBm	25 dBm
Tx Power (5 GHz)	23 dBm	23 dBm	23 dBm	22 dBm	24 dBm
Tx Power (6 GHz)	-	-	23 dBm	22 dBm	24 dBm
Antennas (2.4 GHz)	4 x 5 dBi Omni	4 x 5 dBi Omni	4 x 5 dBi Omni	2 x 5 dBi Omni	4 x 5 dBi Omni
Antennas (5 GHz)	4 x 6 dBi Omni	4 x 6 dBi Omni	4 x 6 dBi Omni	2 x 6 dBi Omni	4 x 6 dBi 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	802.3at	802.3bt
Scanning Radio	-	●	-	-	-
BLE	-	●	-	-	-
Power Consumption (Peak)	19.5W	19.5W	22.5W	21W	38W
Ethernet Port	1x 2.5GE PoE+ port	1x 2.5GE PoE+ port	1x 5GE PoE+ port	1x 10GE PoE+port	1x 10GE PoE++port 1x 10GE port
Mounting	Wall/ Ceiling	Wall/ Ceiling	Wall/ Ceiling	Wall/ Ceiling	Wall/ Ceiling
IP Rating	N/A	N/A	N/A	N/A	N/A
Dimensions	205 x 205 x 33 mm	205 x 205 x 33 mm	205 x 205 x 33 mm	190 x 190 x 39.5 mm	230 x 230 x 39.5mm
Mesh Technology	●	●	●	●	●
Mobile app (Cloud To-Go)	●	●	●	●	●







# Cloud - Access Points

Indoor					
	 Wi-Fi 6	 Wi-Fi 6	 Wi-Fi 7	 Wi-Fi 7	 Wi-Fi 7
Model Name	Cloud6 2x2 Lite	Cloud6 4x4 Lite	Cloud7 2x3x3 Lite	Cloud7 2x2	Cloud7 2x2x2
Model Number	ECW210L	ECW212L	ECW516L	ECW510	ECW520
Wi-Fi Standard	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)	Wi-Fi 7(11be)	Wi-Fi 7(11be)	Wi-Fi 7(11be)
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 & 6GHz
Data Rate (2.4 GHz)	600 Mbps	1200 Mbps	700 Mbps	700 Mbps	700 Mbps
Data Rate (5 GHz)	2400 Mbps	2400 Mbps	4300 Mbps	4300 Mbps	4300 Mbps
Data Rate (6 GHz)	-	-	8700 Mbps	-	5,800 Mbps
Radio Chains	2 x 2:2	4 x 4:4	2 x 2:2(2.4GHz), 3x 3:3(5GHz & 6GHz)	2 x 2:2	2 x 2:2
Tx Power (2.4 GHz)	21 dBm	23 dBm	22 dBm	23 dBm	23 dBm
Tx Power (5 GHz)	21 dBm	23 dBm	22 dBm	21 dBm	23 dBm
Tx Power (6 GHz)	-	-	22 dBm	-	20 dBm
Antennas (2.4 GHz)	2 x 4 dBi Omni	4 x 5 dBi Omni	2 x 5 dBi	2 x 3 dBi Omni	2 x 6 dBi Omni
Antennas (5 GHz)	2 x 5 dBi Omni	4 x 5 dBi Omni	3 x 5 dBi	2 x 5 dBi Omni	2 x 6 dBi Omni
Antennas (6 GHz)	-	-	3 x 5 dBi	-	2 x 6 dBi Omni
PoE Standard	802.3af	802.3at	802.3at	802.3at	802.3at
Scanning Radio	-	-	-	-	-
BLE	-	-	-	-	-
Power Consumption(Peak)	10.7W	17W	20.7W	15.5W	25.4W
Ethernet Port	1x GE PoE port	1x 2.5GE PoE+ port	1x 2.5GE PoE+ port	1x 2.5GE PoE+ port	1x 2.5GE PoE+ port
Mounting	Wall/Ceiling	Wall/Ceiling	Wall/ Ceiling	Wall/ Ceiling	Wall/ Ceiling
IP Rating	N/A	N/A	N/A	N/A	N/A
Dimensions	160 x 160 x 30 mm	205 x 205 x 33 mm	205 x 205 x 33 mm	160 x 160 x 32 mm	158 x 158 x 35.8 mm
Mesh Technology	●	●	●	●	●
Mobile app (Cloud To-Go)	●	●	●	●	●







Outdoor			
		 Wi-Fi 6	 Wi-Fi 6
Model Name	Cloud5 2x2 Outdoor	Cloud6 2x2 Outdoor	Cloud6 4x4 Outdoor
Model Number	ECW160	ECW260	ECW270
Wi-Fi Standard	11ac Wave 2	Wi-Fi 6 (11ax)	Wi-Fi 6 (11ax)
Frequency	2.4 GHz & 5 GHz	2.4 GHz & 5GHz	2.4 GHz & 5GHz
Data Rate (2.4 GHz)	400 Mbps	600 Mbps	1200 Mbps
Data Rate (5 GHz)	867 Mbps	1200 Mbps	2400 Mbps
Data Rate (6 GHz)	-	-	-
Radio Chains	2 x 2:2	2 x 2:2	4 x 4:4
Tx Power (2.4 GHz)	23 dBm	23 dBm	24 dBm
Tx Power (5 GHz)	23 dBm	25 dBm	24 dBm
Tx Power (6 GHz)	-	-	-
Antennas (2.4 GHz)	2 x 5 dBi External Omni	2 x 5 dBi External Omni	4 x 5 dBi External Omni
Antennas (5 GHz)	2 x 5 dBi External Omni	2 x 5 dBi External Omni	4 x 7 dBi External Omni
Antennas (6 GHz)	-	-	-
PoE Standard	802.3af/at	802.3af/at	802.3at/bt
Scanning Radio	-	-	-
BLE	-	-	-
Power Consumption(Peak)	12.6W	15.9W	46W
Ethernet Port	1x GE PoE+ port	1x 2.5GE PoE+ port	1x 2.5GE PoE++ port 1x GE PSE Out port
Mounting	Wall/ Pole	Wall/ Pole	Wall/Pole
IP Rating	IP67	IP67	IP68
Dimensions	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)	●	●	●

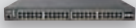
# Cloud - Switches




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

Gigabit Switch			Multi-G Switch			
						
Model Name	L2Plus 48 PoE	L2Plus 48 Full PoE	MGPlus 8 Full PoE	MGPlus 8	MGPlus 8 Full PoE	MGPlus 24 Full PoE
Model Number	ECS1552P	ECS1552FP	ECS2510FP	ECS2512	ECS2512FP	ECS2528FP
Switch Class	Layer 2+	Layer 2+	Layer 2+	Layer 2+	Layer 2+	Layer 2+
Gigabit Ethernet Ports	48	48	-	-	-	16
Multi-Gigabit Ethernet Ports	-	-	8x2.5G	8x2.5G	8x2.5G	8x2.5G
SFP Ports	-	-	-	-	-	-
SFP+ Ports	4	4	2	4	4	4
RJ45 Console Port	●	●	●	●	●	●
Form Factor	19" 1U	19" 1U	13" 1U	13" 1U	13" 1U	19" 1U
Power-over-Ethernet	802.3af/at	802.3af/at	802.3af/at	-	802.3af/at/bt	802.3af/at
Total PoE Budget	410w	740w	240w	-	240w	410w
PoE Capable Ports	Ports 1-48	Ports 1-48	Ports 1-8	-	Ports 1-8	Ports 1-24
Switching Capacity	176Gbps	176Gbps	80Gbps	120Gbps	120Gbps	152Gbps
Packet Forwarding Rate (Mpps)	130.95Mpps	130.95Mpps	59.52 Mpps	89.29 Mpps	89.29 Mpps	113.10 Mpps
MAC Address Table	32K	32K	16k	16k	16k	16k
Packet Buffer Memory	2MB	2MB	512KB	512KB	512KB	1.5MB
Full load Power consumption	476.3 Watts	885 Watts	270.47 Watts	23.52 Watts	299 Watts	499.85 Watts
*PoE Extended Mode	●	●	-	-	-	●
PD Lifeguard	●	●	-	-	-	●
Continuous PoE Power	●	●	-	-	-	●
Dimension	440mm x 310mm x 44mm	440mm x 310mm x 44mm	330mm x 230mm x 44mm	330mm x 230mm x 44mm	330mm x 230mm x 44mm	440mm x 260mm x 44mm





# Cloud - Switches

Multi-G Switch						
						
Model Name	MGPlus 48 Full PoE	Aggregate 8XG	Aggregate 8XG Full PoE	Aggregate 12	MGLite 5	MGLite 8
Model Number	ECS2552FP	ECS5512	ECS5512FP	ECS5512F	ECS205L	ECS208L
Switch Class	Layer 2+	Layer 2+	Layer 2+	Layer 2+	Websmart	Websmart
Gigabit Ethernet Ports	32	-	-	-	-	-
Multi-Gigabit Ethernet Ports	16x2.5G	8 x 10G	8 x 10G	-	5 x 2.5G	8 x 2.5G
SFP Ports	-	-	-	-	-	-
SFP+ Ports	4	4	4	12	-	-
RJ45 Console Port	●	●	●	●	●	●
Form Factor	19" 1U	13" 1U	13" 1U	Half Rack	6.7" (desktop)	6.7" (desktop)
Power-over-Ethernet	802.3af/at	-	802.3af/at/bt (up to 90W)	-	-	-
Total PoE Budget	740w	-	410w	-	-	-
PoE Capable Ports	Ports 1-48	-	Ports 1-8	-	-	-
Switching Capacity	224Gbps	240Gbps	240Gbps	240Gbps	25Gbps	40Gbps
Packet Forwarding Rate (Mpps)	166.67 Mpps	178.57 Mpps	178.57 Mpps	178.57 Mpps	18.6 Mpps	29.76 Mpps
MAC Address Table	32k	32k	32k	32k	4K	4K
Packet Buffer Memory	2MB	2MB	2MB	2MB	1MB	1MB
Full load Power consumption	913 Watts	29.22 Watts	410.35 Watts	43.4 Watts	(TBD)	(TBD)
*PoE Extended Mode	●	-	-	-	●	●
PD Lifeguard	●	-	-	-	●	●
Continuous PoE Power	●	-	-	-	●	●
Dimension	330mm x 310mm x 44mm	330mm x 230mm x 44mm	330mm x 230mm x 44mm	210mm x 230mm x 44mm	170mm x 105mm x 27mm	170mm x 105mm x 27mm

Multi-G Switch	
	
Model Name	MGPlus 24 Full PoE 6 SFP+
Model Number	ECS2530FP
Switch Class	Layer 2+
Gigabit Ethernet Ports	-
Multi-Gigabit Ethernet Ports	24x2.5G
SFP Ports	-
SFP+ Ports	6
RJ45 Console Port	●
Form Factor	19" 1U
Power-over-Ethernet	802.3af/at/bt
Total PoE Budget	740w
PoE Capable Ports	Ports 1-16 at Ports 17-24 bt
Switching Capacity	240Gbps
Packet Forwarding Rate (Mpps)	178.57 Mpps
MAC Address Table	16k
Packet Buffer Memory	1.5MB
Full load Power consumption	873.73 Watts
*PoE Extended Mode	-
PD Lifeguard	●
Continuous PoE Power	●
Dimension	440mm x 260mm x 44mm

Switch Extender			
			
Model Name	Extender 4 PoE	Extender 4GE 1 SFP	Extender 3GE 4 PoE 1SFP
Model Number	EXT1105P	EXT1106P	EXT1109P
Switch Class	Websmart	Websmart	Websmart
Gigabit Ethernet Ports	5	5	8
Multi-Gigabit Ethernet Ports	-	-	-
SFP Ports	-	1	1
SFP+ Ports	-	-	-
RJ45 Console Ports	-	-	-
Form Factor	6.7" (desktop)	4.92" (desktop)	9.45" (Desktop)
Power-over-Ethernet	802.3 af/at	-	802.3 af/at
Total PoE Budget	Up to 60w	-	Up to 60w
PoE Capable Ports	Ports 2-5	-	Ports 2-5
Switching Capacity	10Gbps	12Gbps	18Gbps
Packet Forwarding Rate	7.44 Mpps	8.93 Mpps	13.39 Mpps
MAC Address Table	8k	8k	8k
Packet Buffer Memory	512KB	512KB	512KB
Full load Power consumption	69.36 Watts	4.57 Watts	64.27 Watts
PoE Extended Mode	-	-	-
PD Lifeguard	-	-	-
Continuous PoE Power	●	●	●
Dimensions	170mm x 105mm x 27mm	125 mm x 73.9 mm x 28 mm	240 mm x 105 mm x 27 mm
Cloud Managed Mode	●	●	●
FitXpress Managed Mode	●	●	●
Fitcon Mode	Future	Future	Future
Standalone Mode	-	-	-

# Cloud - VPN Firewalls

VPN Firewall				
				
Model Name	Gateway3 4G 1SFP	Gateway5 4mG	Gateway6 4mG	Gateway6 8mG 2SFP+
Model Number	ESG320	ESG510	ESG610	ESG620
Processor	Dual Core	Quad Core	Quad Core	Quad Core
Operating Frequency	2.1GHz	1.6GHz	2.2GHz	2.2GHz
Memory	4GB	4GB	8GB	8GB
Flash Storage	8GB	8GB	8GB	16GB
RJ-45 Interface	4 x 1G	4 x 2.5G	4 x 2.5G	8 x 2.5G
SFP interface	1xSFP	-	-	2 x SFP+
PoE ports	1	1	1	4
PoE Standard	802.3 af/at	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	1 x RJ-45 console/1 x USB 3.0
Mounting Method	Wall mount	Wall mount	Wall mount	Rack mount
Firewall (SPI throughput)	3G	4G	6.8G(**)	6.8G(**)
VPN throughput	900M	970M	1.5G(**)	1.5G(**)
Max. Concurrent VPN Tunnels	100	200	300(**)	300(**)
Max. Concurrent VPN Users*	50	250	380(**)	380(**)
Max. TCP Concurrent Sessions	1,000,000	1,000,000	1,250,000 (**)	1,250,000 (**)
Max VLAN	16	96	160(**)	160(**)
Power	54V/1.2A	54V/1.2A	54V/1.2A	internal 300w power
Operation Temperature	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C
Humidity (non-condensing)	5 to 95% 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	210 x 179.5 x 35 mm	330 x 230 x 44 mm
Package Contents	<ul style="list-style-type: none"> <li>- Power Adapter</li> <li>- Power Cord</li> <li>- RJ-45 Console Cable</li> <li>- Wall Mount Kit</li> <li>- Product Card</li> </ul>	<ul style="list-style-type: none"> <li>- Power Adapter</li> <li>- Power Cord</li> <li>- RJ-45 Console Cable</li> <li>- Wall Mount Kit</li> <li>- Product Card</li> </ul>	<ul style="list-style-type: none"> <li>- Power Adapter</li> <li>- Power Cord</li> <li>- RJ-45 Console Cable</li> <li>- Wall Mount Kit</li> <li>- Product Card</li> </ul>	<ul style="list-style-type: none"> <li>- Power Cord</li> <li>- RJ-45 Console Cable</li> <li>- Rack Mount Kit</li> <li>- Product Card</li> </ul>
Regulatory Compliance	<ul style="list-style-type: none"> <li>- FCC Part 15 (Class B)</li> <li>- IC</li> <li>- CE EMC</li> <li>- CB</li> <li>- UL</li> </ul>	<ul style="list-style-type: none"> <li>- FCC Part 15 (Class B)</li> <li>- IC</li> <li>- CE EMC</li> <li>- CB</li> <li>- UL</li> </ul>	<ul style="list-style-type: none"> <li>- FCC Part 15 (Class B)</li> <li>- IC</li> <li>- CE EMC</li> <li>- CB</li> <li>- UL</li> </ul>	<ul style="list-style-type: none"> <li>- FCC Part 15 (Class B)</li> <li>- IC</li> <li>- CE EMC</li> <li>- CB</li> <li>- UL</li> </ul>




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




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

# Cloud - PDUs

PDU				
				
Model Name	PDU 6P 12A 100-120V	PDU 14P 12A 100-120V	PDU 6P 10A 200-240V	PDU 12P 10A 200-240V
Model Number	ECP106	ECP214	ECP106-INT	ECP212-INT
Dimensions	440 x 44 x 70 mm	440 x 88 x 88 mm	440 x 44 x 85 mm	440 x 88 x 101.9 mm
Weight	1035 g	2430 g	1124 g	2460 g
Enclosure Material	AL6063	SECC	AL6063	SECC
Networking Interfaces	(2) 10/100/1000 BASE-T	(2) 10/100/1000 BASE-T	(2) 10/100/1000 BASE-T	(2) 10/100/1000 BASE-T
Management Interface	Ethernet	Ethernet	Ethernet	Ethernet
Power Output	(6)NEMA-5-15R, 120V AC, 15A max.,60Hz	(14)NEMA-5-15R, 120V AC, 15A max.,60Hz	(6)IEC-C13, 200-240V AC, 10A max.,50/60Hz	(12)IEC-C13, 200-240V AC, 10A max.,50/60Hz
Power Method	100-120VAC, 12A max.,50/60Hz	100-120VAC, 12A max.,50/60Hz	200-240VAC, 10A max.,50/60Hz	200-240VAC, 10A max.,50/60Hz
Max. Power Consumption	1440W for 120V AC	1440W for 120V AC	2400W for 240VAC	2400W for 240VA
Buttons	(1) Factory Reset (1) Circuit Breaker (1)Outlet Power Button (2)LCD Control Buttons	(1) Factory Reset (1) Circuit Breaker (1)Outlet Power Button (2)LCD Control Buttons	(1) Factory Reset (1) Circuit Breaker (1)Outlet Power Button (2)LCD Control Buttons	(1) Factory Reset (1) Circuit Breaker (1)Outlet Power Button (2)LCD Control Buttons
Protection	Surge Protection Gounded Protection	Surge Protection Gounded 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	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: 0°C ~ +45°C	Operating: 0°C ~ +45°C
Operating Humidity	Humidity 5% ~ 95% RH Non-condensing	Humidity 5% ~ 95% RH Non-condensing	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	CERCM,UL 62368-1	CERCM,UL 62368-1

# Cloud - AI Camera

	Cameras		
			
Model Name	Cam5MP Dome IP67	Cam5MP Bullet IP66	EnGenius Cam8MP Dome
Model Number	ECC100	ECC120	ECC500
Sensor	1/2.8 " Sony Starvis 5MP CMOS	1/2.8 " Sony Starvis 5MP CMOS	1/2.8 " Sony Starvis 8MP CMOS
Lens	Fixed 3.16mm	Fixed 4mm	Varifocal 3.2 ~ 10.5mm motorized zoom, Remote zoom, AF
View Angle	H: 102°, V: 71.6°, D: 132°	H: 78°, V: 56°, D: 103°	H: 97° ~ 35.3°, V: 56.1° ~ 20.3°, D: 115° ~ 41.7°
Night Vision	Built-in IR LED illumination and IR cut filter	Built-in IR LED illumination and IR cut filter	Built-in IR LED illumination and IR cut filter
IR Distance	>20m / 66ft	30m/98ft	30m/98ft
Lens Adjustment Range	Manual, Pan: 0° ~ 350°, Tilt: 0° ~ 90°, Roll: 0° ~ 350°	Manual, Tilt: 0°~90°, Roll: 0°~180°	Manual, Pan: 0° ~ 350°, Tilt: 0° ~ 60°, Roll: 0° ~ 350°
Resolution	5MP 2592 x 1944 (4:3)	5MP 2592 x 1944 (4:3)	8MP 3840x2160 (16:9)
Frame Rate	20 FPS	20 FPS	20 FPS
Video Compression	H.265, H.264	H.265, H.264	H.265, H.264, Smart Stream
Streaming Bitrate	768Kbps ~ 2.5Mbps (Optional)	768Kbps ~ 2.5Mbps (Optional)	600Kbps ~ 6Mbps (Optional, Adaptive)
Video Processing	AE, AWB, AGC, BLC, HLC, WDR, HDR, 3DNR, Privacy Mask, OSD, Video Orientation	AE, AWB, AGC, BLC, HLC, WDR, HDR, 3DNR, Privacy Mask, OSD, Video Orientation	AE, AWB, AGC, BLC, LDC, WDR, HDR(120dB), 3DNR, Privacy Mask, OSD, Video Orientation
Audio Format	AAC, G.711	-	AAC, G.711
Microphone	Built-in, 5m / 15ft distance	Not supported	Built-in, 5m / 15ft distance
Speaker	Not supported	Not supported	Not supported
AI NPU	Built-in	Built-in	Built-in
People Detection and Tracking	History search, People counting	History search, People counting	History search, People counting
Vehicle Detection and Tracking	History search, Vehicle counting	History search, Vehicle counting	History search, Vehicle counting
Tampering Detection	Event alert	Event alert	Event alert
Restricted Area Detection	Event alert, Object counting	Event alert, Object counting	Event alert, Object counting
Cross Line Detection	Event alert, Object counting	Event alert, Object counting	Event alert, Object counting
Person Attribute Recognition	-	-	History search, Target alert
Vehicle Attribute Recogniton	-	-	History search, Target alert
Facial Recognition	-	-	Hisotry search, Search by Photo, Target alert
License Plate Recognition	-	-	History search, Target alert
EnGenius Cloud AI	Support	Support	Support
Storage Size	256GB on board	256GB on board	512GB on board
Retention Method	24/7 seamless, Auto Recycling	24/7 seamless, Auto Recycling	24/7 seamless, Auto Recycling
Retention Days	20 days based on video bitrate	20 days based on video bitrate	30 days
Recording Encryption	-	-	AES128
Storage Redundancy	Support EnGenius NVS and Cloud storage	Support EnGenius NVS and Cloud storage	Support EnGenius NVS and Cloud storage
Networking Interface	10/100 MbE RJ45 port	10/100 MbE RJ45 port	10/100/1000 MbE RJ45 port
Max. Power Consumption	6.1W	7.5W	12.9W
Power Method	PoE 802.3af Class 2	PoE 802.3af Class 3	PoE 802.3af Class 3
LED Indicator	System power and status indicator	System power and status indicator	System power and status indicator
RTSP	Supported	Supported	Supported
Reset Button	Internal	External line	Internal
Operating Temperature	-20°C ~ 50°C / -4°F ~ 122°F	-20°C ~ 50°C / -4°F ~ 122°F	-40°C ~ 50°C / -22°F ~ 122°F
Humidity	98%	98%	5~90%
Certifications	CE, FCC	CE, FCC	CE, FCC
Weatherproofing	IP67	IP66	IP67
Resistance	IK10	-	IK10
Dimensions	Ø121.7 x 94.8 mm (Ø4.79 x 3.73")	Ø76x 200 mm (Ø2.99 x 7.88")	Ø155 x 106 mm (Ø6.10x 4.17")
Weight	525 g / 18.5 oz	330g / 11.64oz	994 g / 35.06 oz
Enclosure material	Aluminum alloy, Polycarbonate	Aluminum alloy, Polycarbonate	Aluminum alloy, Polycarbonate
Web Browser	Chrome, Safari, Edge	Chrome, Safari, Edge	Chrome, Safari, Edge
Mobile App	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android

NVS			
			
Model Name	AI NVS 2Bay Tower	AI NVS 4Bay Tower	AI NVS 4Bay Rackmount
Model Number	EVS1002D	EVS1004D	EVS3004U
Max Camera Connection	16 cameras	16 cameras	32 cameras
Camera Resolution	FHD, 4MP, 5MP, 4K	FHD, 4MP, 5MP, 4K	FHD, 4MP, 5MP, 4K
Camera Interface	ONVIF Profile S, RTSP, EnGenius	ONVIF Profile S, RTSP, EnGenius	ONVIF Profile S, RTSP, EnGenius
RAID	RAID 1	RAID 1/5/6	RAID 1/5/6
Storage Retention	24/7 seamless recording and retention	24/7 seamless recording and retention	24/7 seamless recording and retention
Max AI Empower	2 cameras	2 cameras	32 cameras
Processor	Intel Elkhart Lake x6211E	Intel Elkhart Lake x6211E	Intel Core Ultra 5 225H
Memory	8GB	8GB	64GB
Flash	16GB	16GB	256GB
Security	TPM v2.0	TPM v2.0	TPM v2.0
Drive Interface	SATA 3.0 x 4	SATA 3.0 x 4	SATA 3.0 x 4
Networking Interface	10GbE RJ45 x 1, 1GbE RJ-45 x 1	10GbE RJ45 x 1, 1GbE RJ-45 x 1	10GbE RJ45 x 1, 1GbE RJ-45 x 1
Display	HDMI 1.4b x 1	HDMI 1.4b x 1	HDMI 1.4b x 1
USB Port	3.0 Type A x 2, 2.0 Type A x 1	3.0 Type A x 2, 2.0 Type A x 1	3.0 Type A x 1, 2.0 Type A x 2
FAN Speed Control	Yes	Yes	Yes
Thermal Sensor	System x 1, CPU x 1	System x 1, CPU x 1	System x 1, CPU x 1
Buzzer	Yes	Yes	Yes
Button	Power, Function	Power, Function	Power, Function
LED Indicator	Power x 1, Function x 1, HDD x 4	Power x 1, Function x 1, HDD x 4	Power x 1, Function x 1, HDD x 4
Power Supply	DC12V@5A	DC12V@7.5A	DC12V@7.5A
Max. Power Consumption	92W	140W	300W
Ambient Operating Temperature	0~50°C (32~122°F)	0~50°C (32~122°F)	0~50°C (32~122°F)
Ambient Operating Humidity	10~85% RH	10~85% RH	10~85% RH
People Detection and Tracking	Event detection Smart Motion Search People Counting	Event detection Smart Motion Search People Counting	Event detection Smart Motion Search People Counting
Vehicle Detection and Tracking	Event detection Smart Motion Search Vehicle Counting	Event detection Smart Motion Search Vehicle Counting	Event detection Smart Motion Search Vehicle Counting
EnGenius Cloud AI	Natural Language Search Contextual AI Analysis SD-Alert	Natural Language Search Contextual AI Analysis SD-Alert	Natural Language Search Contextual AI Analysis SD-Alert
Kensington Slot	Yes	Yes	-
Drive Pool Lock	Yes	Yes	-
Enclosure Material	Aluminium alloy, Polycarbonate	Aluminium alloy, Polycarbonate	Aluminium alloy, Polycarbonate
Dimensions (L x W x H)	118.8 x 217.5 x 152.0 mm	179.6 x 227.5 x 157.0 mm	440 x 410 x 44 mm
Weight	1.862Kg	2.647Kg	6.6225Kg
Web Browser	Chrome, Safari, Edge	Chrome, Safari, Edge	Chrome, Safari, Edge
Mobile App	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android

\*EVS3004U subject to change when available in the future.



■ **Japan**

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