

#### **Cloud Switch Series**



# **EnGenius Cloud Switch Series**

Multi-Gigabit Performance, Enterprise Features & Cloud Management

EnGenius Cloud Switch Series provides enterpriseclass features for simplifying network configuration and monitoring for mid-size to large businesses. With advanced management, EnGenius switches enhance network performance to allow companies to focus on growing their business.

Simple — With easy-to-deploy design, EnGenius managed multi-gigabit & gigabit switches are operational within minutes. Organizations with limited IT support and budgets can create a reliable, efficiently managed network in no time.

**Flexible** — Choose the port and physical configuration that meets your network and space requirements for optimal performance. Select the management method most effective for the network – locally managed, remotely and locally managed, or cloud managed.

**Reliable** — EnGenius Cloud's reliable gigabit and multigigabit access for networked devices reduces delays that interrupt communications. EnGenius uses its decades of manufacturing and software development experience, longlasting chipset vendor relationships, and tight manufacturing process to build reliable hardware.

**Secure** — With EnGenius Cloud, your network devices are protected with two-factor authentication and non-sequential serial numbers and MAC address verification to ensure only authorized cloud devices are on the network.

#### **Features & Benefits**

- Full-featured layer 2+ switching
- 8-48 10/100/1000/2500/5000/10000 Base-T GbE ports
- 802.3bt/at/af PoE++ ready on all ports with 55-740W PoE budgets
- 1-10 Gbps SFP+ extends connectivity and provides redundancy, and failover
- PoE extended mode extends PoE range up to 250 meters
- PD Lifeguard provides real-time detection and auto-reboot PoE power
- Continuous PoE power supplies PoE power even during switch upgrades
- Switch alert system so teams can be proactively notified of potential issues
- Quick-scan device register, remote monitoring, and troubleshooting
- Hybrid switch supports multiple management options



EnGenius now offers a 2 year factory waranty for all cloud products.

### **Benefits to Help Grow Your Business**

#### Increased Flexibility for Network Design

Select either 8-, 24-, or 48-multi-gigabit or gigabit ports and Power-over-Ethernet (PoE++)-ready Layer 2+ switches with 1-10 Gbps SFP+ ports. Cloud managed switch model options also include desktop and rack mountable, fanless, and SmartFan designs.

#### **Enhanced Network Performance**

EnGenius' full-featured Layer 2+ multi-gigabit and gigabit switches improve network speed and performance by controlling the available bandwidth speed for devices such as access points at the port level. By providing the available speed needed in areas where bandwidth needs vary such as conference rooms and lobbies, EnGenius switches provides faster overall network performance.

#### **Optimized Network Devices**

EnGenius switches allow businesses to optimize the installation and power management of network devices, such as Wi-Fi 6E wireless access points, AV controllers, PTZ cameras, digital signage, and lighting. By providing 802.3bt/at/af PoE++ power and data on all ports, companies can regulate power budgets according to device requirements and remotely power cycle individual ports.

#### Built-in Advanced PoE to Empower Surveillance

EnGenius provides reliable, high-quality video streaming at long distances to enable real-time monitoring and recovery of surveillance if the camera goes down, and to keep the power supply uninterrupted during switch firmware upgrades. EnGenius offers a series of switches with advanced PoE features designed for reliable, secure, high-tech surveillance.

#### **High-Speed Gigabit with Fiber**

The switch's 10 Gbps SFP+ slots can help when aggregating or up-linking wired networks throughout buildings extending beyond the limitations of Ethernet cabling. By reducing delays, businesses experience more consistent and uninterrupted communications.

#### Keep Up with Today's Technologies

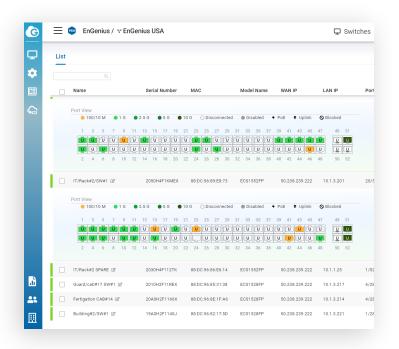
High-performing access points supporting faster speeds and hundreds of concurrent users, now support 1, 2.5, 3.5, and 5 Gbps Ethernet connections. Multi-gig switches using existing cabling can support up to 1, 2.5, 5, and 10 Gbps per a port and automatically detect the speed needed by the connected end device. Utilize the higher PoE++ (802.3bt) standard on any port for the growing demand of high-powered devices like Wi-Fi 6E wireless access points, AV controllers, PTZ cameras, digital signage, and lighting.

#### **Increased Access Control and Security**

Protect the network with 802.1X port-based client authentication with dynamic VLAN and security through a RADIUS server. Utilizing Access Control Lists (ACLs), administrators can see who has access to network segments while screening traffic from unauthorized MAC or IP addresses. By establishing a guest VLAN to grant and limit internet resources for visitors, guests can use the network while also keeping the network secure.

#### Improved VLAN/Voice and Quality of Service

Automatically set up voice VLANs using LLDP-MED for IP phone in seconds. Segment the network by departments or traffic types for increased performance and security with 802.1Q VLAN, statically or dynamically. The 802.1p Class of Service prioritizes compliant VoIP and video traffic ensuring bandwidth intensive, time-sensitive data is forwarded immediately for clear, smooth voice and video delivery.



#### Minimize Truck-Rolls with In-Depth Visibility

Speed up tech support calls and minimize truck-rolls by quickly isolating issues with switch diagnostic tools. Remotely check cable continuity, port statistics, and device information all from a powerful diagnostic tool. The network topology view automatically maps the network deployment and displays device relationships across the infrastructure. No more manual tracking required — simply use network topology view to troubleshoot switches or access points directly from the cloud management interface. Grab high-level information by hovering over the device icon or click on details to take you right to the cloud device page.

### Every Cloud Device is Secure and Protected by

#### **Advanced Authentication**

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

#### Cloud Improves Setup, Registry and Device Management of Multi-Gig & Gigabit Switches

For quick and simple setup, manage your switches using EnGenius Cloud. Scan and assign switches into an organization and network for device registration and configuration using the EnGenius Cloud app. Simply refine configurations under the list view for switches in the switch's detail page after initial setup and registration.

EnGenius Cloud's dashboard provides a quick health check status of all your switches in an organization and network. Simply click on the switch picture from the dashboard to dive into detailed switch configurations and system information.

Conveniently & easily monitor and troubleshoot all of your network switches in one location. Quickly review switch list to compare resources and check overall configurations with other switches within the network. Further access individual switch information

by (1) clicking detail view to get real-time meters and (2) configuring system and port settings for easy setup and fine tuning of switches.

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

Activity			Cable Tes	t			Last updated: 2022/3/16
Ports	100/10 Mbps 100/10 Mbps 1 1 3 5 7 9 11 13 15 17	1 Gbps 2.5 Gbps 5 Gbps 10 Gbps CRC Em	8		3     5     7     9     11     13     15       4     6     8     10     12     14     16       (Click ports to do the	18 20 22 24 26 28	
	1     3     5     7     9     11     13     15     17       2     4     6     8     10     12     14     16     18		O Disconn	ected 🕘 Disabled			✓ Test
	Port 24	Click port to fix the window		1 - 2 (Pair A)	3 - 4 (Pair B)	5 - 6 (Pair C)	7 - 8 (Pair D)
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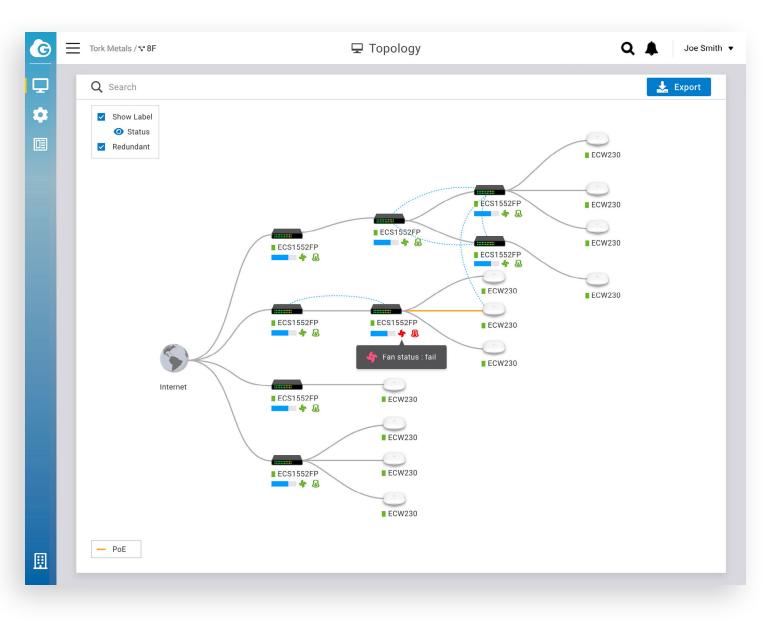
# Simplified Switch Management, Visibility, and Troubleshooting

By using multiple methods to manage switches, EnGenius decreases administration time through remote management, visibility, and troubleshooting. Select the most effective management approach based on network architecture, administrative permissions, technical aptitude, or even budget.

**Locally Manage** – manage each EnGenius switch in a standalone setup from its intuitive user interface that provides full access into all the Layer 2+ switching features.

**Remote and Local Management** – manage up to 100 EnGenius switches with the plug-and-play SkyKey device, which provides on-premises and subscription-free cloud network management capabilities. **Remote & Local Management** – manage 1,000s of EnGenius switches with ezMaster network software, an on-premises solution utilizing a virtual machine server or a private-cloud AWS account that easily configures and maintains multiple customer sites and thousands of devices via ezMaster network management software, all with no license or subscription fees.

**Cloud Management** – remotely or locally manage an unlimited number of EnGenius switches with EnGenius Cloud, a true license-free cloud management solution that provides quick deployment from anywhere, deepdive analytics to review system performance, and custom device alerts through a simple to use smart phone app.



## EnGenius Cloud Managed 10-Gigabit Switches

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MODELS	FIBER ECS5512F	10-0 ECS5512FP	ECS5512
Network Standards	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x
10/100/1000 Base-T	N/A	N/A	N/A
10/100/1000/2500 Base-T	N/A	N/A	N/A
10/100/1000/2500/5000/ 10000 Base-T	N/A	8 PoE ++	8
10/100/1000 SFP Ports	N/A	N/A	N/A
10/100/1000/10000 SFP+ Ports	12 x 10G	4 x 10G	4 x 10G
Rackmount	9.5″ 1U	13" 1U	13″ 1U
Total PoE Budget	N/A	420W	N/A
PoE+ Capable Ports	N/A	1-8 PoE++	N/A
Switching Capacity	240 Gbps	240 Gbps	240 Gbps
Packet Forwarding Rate	178.57 Mpps	178.57 Mpps	178.57 Mpps
Forwarding Mode	Store-and-forward	Store-and-forward	Store-and-forward
MAC Address Table	32k	32K	32K
Packet Buffer Memory	2 MB	2 MB	2 MB
Power Source	100 to 240 VAC 50/60Hz	100 to 240 VAC 50/60Hz	100 to 240 VAC 50/60Hz
Full Load Power Consumption	745.61 Watts	506.7 Watts	29.22 Watts
VLANs	VID from 1-4094 (Max. 256 groups)	VID from 1-4094 (Max. 256 groups)	VID from 1-4094 (Max. 256 groups)

# EnGenius Cloud Managed Multi-Gigabit Switches

			MULTI-GIG		
MODELS	ECS2552FP	ECS2528FP	ECS2512FP	ECS2510FP	ECS2512
Network Standards	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x
10/100/1000 Base-T	32 PoE +	16 PoE +	N/A	N/A	N/A
10/100/1000/2500 Base-T	16 PoE +	8 PoE +	8 PoE ++	8 PoE+	8
10/100/1000/2500/5000/ 10000 Base-T	N/A	N/A	N/A	N/A	N/A
10/100/1000 SFP Ports	N/A	N/A	N/A	N/A	N/A
10/100/1000/10000 SFP+ Ports	4 x 10G	4 x 10G	4 x 10G	2 x 10G	4 x 10G
Rackmount	19" 1U	19" 1U	13" 1U	13" 1U	13" 1U
Total PoE Budget	740W	410W	240W	240W	N/A
PoE+ Capable Ports	1-48 PoE+	1-24 PoE+	1-8 PoE++	1-8 PoE+	N/A
Switching Capacity	224 Gbps	152 Gbps	120 Gbps	120 Gbps	120 Gbps
Packet Forwarding Rate	166.67 Mpps	113.10 Mpps	89.29 Mpps	89.29 Mpps	89.29 Mpps
Forwarding Mode	Store-and-forward	Store-and-forward	Store-and-forward	Store-and-forward	Store-and-forward
MAC Address Table	32k	16k	16K	16k	16K
Packet Buffer Memory	2 MB	2 MB	512 KB	512 KB	512 KB
Power Source	100 to 240 VAC 50/60Hz				
Full Load Power Consumption	745.61 Watts	412.26 Watts	440.78 Watts	440.78 Watts	440.78 Watts
VLANs	VID from 1-4094 (Max. 256 groups)				

## **EnGenius Cloud Managed Gigabit Switches**

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		GIGABIT	
MODELS	ECS1552FP	ECS1552P	ECS1552
Network Standards	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x
10/100/1000 Base-T	48 PoE +	48 PoE +	48
10/100/1000/2500 Base-T	N/A	N/A	N/A
10/100/1000/2500/5000/ 10000 Base-T	N/A	N/A	N/A
10/100/1000 SFP Ports	N/A	N/A	N/A
10/100/1000/10000 SFP+ Ports	4 x 10G	4 x 10G	4 x 10G
Rackmount	19" 1U	19" 1U	19" 1U
Total PoE Budget	740W	410W	N/A
PoE+ Capable Ports	1-48 PoE+	1-48 PoE+	N/A
Switching Capacity	176 Gbps	176 Gbps	176 Gbps
Packet Forwarding Rate	130.95 Mpps	130.95 Mpps	130.95 Mpps
Forwarding Mode	Store-and-forward	Store-and-forward	Store-and-forward
MAC Address Table	32K	32K	32K
Packet Buffer Memory	2 MB	2 MB	2 MB
Power Source	100 to 240 VAC 50/60Hz	100 to 240 VAC 50/60Hz	100 to 240 VAC 50/60Hz
Full Load Power Consumption	885 Watts	476.3 Watts	43.92 Watts
VLANs	VID from 1-4094 (Max. 256 groups)	VID from 1-4094 (Max. 256 groups)	VID from 1-4094 (Max. 256 groups)

# EnGenius Cloud Managed Gigabit Switches



	GIGABIT			
MODELS	ECS1528FP	ECS1528P	ECS1528	ECS1528T
Network Standards	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x
10/100/1000 Base-T	24 PoE +	24 PoE +	24	24
10/100/1000/2500 Base-T	N/A	N/A	N/A	N/A
10/100/1000/2500/5000/ 10000 Base-T	N/A	N/A	N/A	N/A
10/100/1000 SFP Ports	N/A	N/A	N/A	N/A
10/100/1000/10000 SFP+ Ports	4 x 10G	4 x 10G	4 x 10G	4 x 10G
Rackmount	19" 1U	19" 1U	19" 1U	13" 1U
Total PoE Budget	410W	240W	N/A	N/A
PoE+ Capable Ports	1-24 PoE+	1-24 PoE+	N/A	N/A
Switching Capacity	128 Gbps	128 Gbps	128 Gbps	128 Gbps
Packet Forwarding Rate	95.23 Mpps	95.23 Mpps	95.23 Mpps	95.23 Mpps
Forwarding Mode	Store-and-forward	Store-and-forward	Store-and-forward	Store-and-forward
MAC Address Table	16k	16k	16k	16k
Packet Buffer Memory	2 MB	2 MB	2 MB	2 MB
Power Source	100 to 240 VAC 50/60Hz			
Full Load Power Consumption	500.46 Watts	297.6 Watts	24.41 Watts	412.26 Watts
VLANs	VID from 1-4094 (Max. 256 groups)			

## **EnGenius Cloud Managed Gigabit Switches**



	CICABIT		
MODELS	ECS1112FP	ECS1008P	
Network Standards	802.3/u/ab/bz/an/x	802.3/u/ab/bz/an/x	
10/100/1000 Base-T	10 (8 PoE+)	8 PoE	
10/100/1000/2500 Base-T	N/A	N/A	
10/100/1000/2500/5000/ 10000 Base-T	N/A	N/A	
10/100/1000 SFP Ports	2 X 1G	N/A	
10/100/1000/10000 SFP+ Ports	N/A	N/A	
Rackmount	13" 1U	N/A	
Total PoE Budget	130W	55W	
PoE+ Capable Ports	1-8 PoE+	1-8 PoE+	
Switching Capacity	24 Gbps	16 Gbps	
Packet Forwarding Rate	17. 856 Mpps	11.904 Mpps	
Forwarding Mode	Store-and-forward	Store-and-forward	
MAC Address Table	8k	8k	
Packet Buffer Memory	512 KB	512 KB	
Power Source	100 to 240 VAC 50/60Hz	100 to 240 VAC 50/60Hz	
Full Load Power Consumption	152.8 Watts	63.18 Watts	
VLANs	VID from 1-4094 (Max. 256 groups)	VID from 1-4094 (Max. 256 groups)	

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

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