The Neutron Series
Distributed Network Management Solution

PoE Gigabit WLAN Management Smart Switch

Simplified Management & Optimal Network Performance for Small-to-Mid-Size Organizations

The EnGenius Neutron PoE Gigabit WLAN Management Smart Switches featuring 8-, 24- or 48- PoE Gigabit ports and support full Layer 2 manageability.

The Switches offer simplified network configuration, monitoring, and management options plus ezMaster™ Centralized Network Management Software, a robust, easy-to-use Web-based tool.

Enterprise-class features optimize network efficiency ensuring peak performance while reducing expenses for cost-conscious SMB organizations.

Whether installed in small or mid-size organizations such as medical offices, warehouses, or large homes, the Smart Switch's design and easy-to-use interface enables effortless and efficient deployment and operation. Organizations with limited IT support and budgets can create a reliable, efficiently managed network in no time.

High Performance Gigabit & Management Flexibility

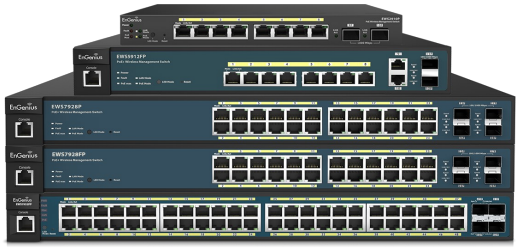
Each of the Switch's Gigabit Ethernet ports provide seamless, high-speed access for networked devices while reducing bottlenecks that can interrupt communications. The Switch offers deployment flexibility efficiently supporting both wired and wireless networks.

Easy Network Management, Visibility & Troubleshooting

Achieve network management, visibility, and troubleshooting locally through the Switch's on-board Web interface tools or remotely with ezMaster software. Its Network Topology view automatically maps the deployment, displaying device relationships across the infrastructure, and is useful for troubleshooting issues without manual tracking.

Power and Connect Access Points, IP Cameras, VoIP Phone Systems and More

Offers greater flexibility to users by delivering standards-based IEEE 802.3af/at to increase network flexibility. Add devices to the existing network infrastructure without additional wire planning or reorganizing of the original network design.



Features

- 10/100/1000 Mbps Gigabit Ethernet Ports
- Dedicated SFP slots for longer connectivity via fiber uplinks and for uplink redundancy and failover
- IEEE 802.3af/at Power-over-Ethernet support providing flexibility and simplicity for device deployment
- Network Troubleshooting, Monitoring, & Email Alerts
- Configure, manage & monitor up to 50 Neutron EWS APs locally via Controller Mode
- Centrally manage wired & wireless networks via ezMaster™
- Security: Access Control List/Port Security; 802.1X & RADIUS Authentication
- IGMP and MLD snooping provides advanced multicast filtering
- 802.3ad Link Aggregation (LACP) supports traffic load balancing
- Voice VLAN for fast, reliable deployment of VoIP services
- Advanced QoS with IPv4/IPv6 ingress traffic filtering (ACLs) & prioritization
- Energy Efficient Ethernet (802.3az) improves energy savings with compliant devices
- Dual firmware images improves reliability & network uptime
- Standard-based technology, ensuring interoperability with any standard-based devices in the existing network

Wireless Device Management

Quickly discover, configure, and monitor Neutron EWS Access Points and manage up to 50 devices within the local subnet through the Switch's built-in wireless network controller features.

Centrally Manage the Wired & Wireless Network

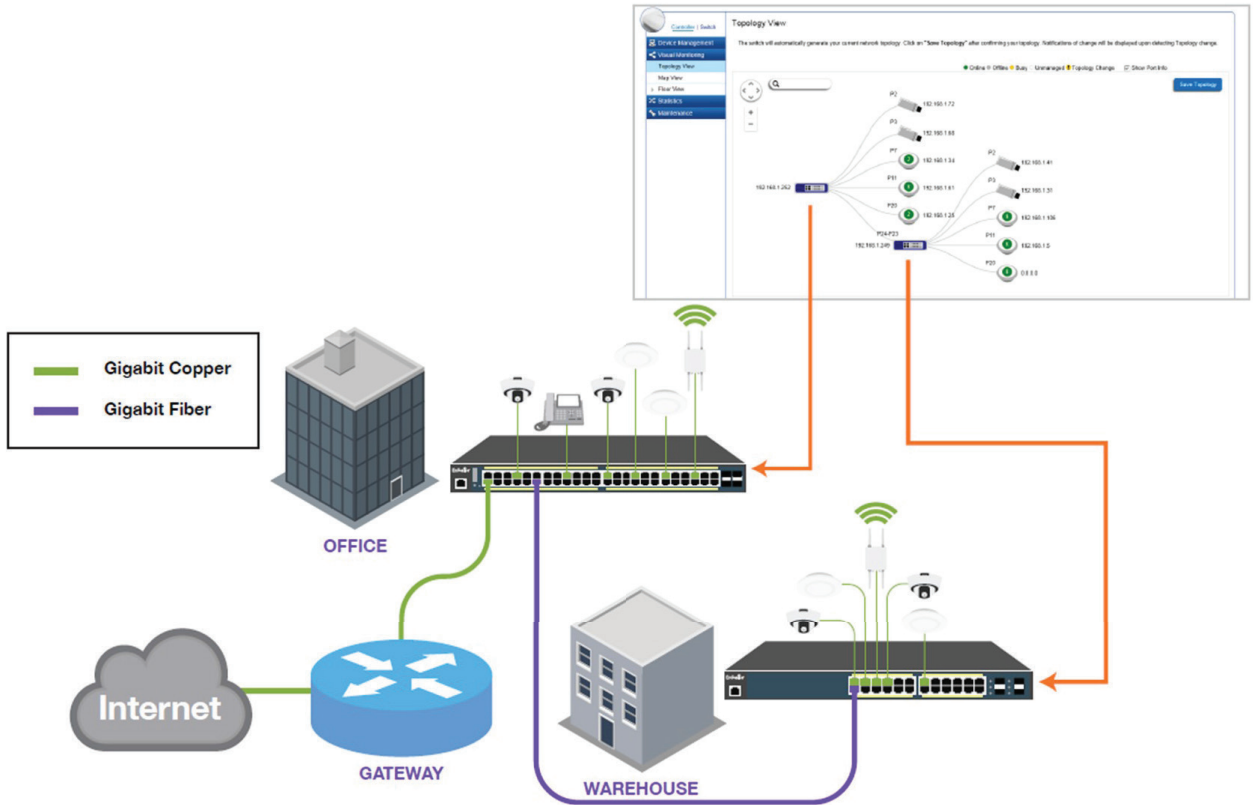
Remotely manage Neutron EWS Access Points, Switches, and IP Cameras through ezMaster Network Management Software. Centrally manage hundreds of EWS devices across the network regardless of its size or location with no licensing or subscription fees.

VLAN/Voice & Quality of Service

Segment the network by departments or traffic types for increased performance and security with 802.1Q VLAN. Prioritize compliant VoIP and video traffic using 802.1p Class of Service (CoS) ensuring high bandwidth, time-sensitive data is forwarded immediately for clear, smooth voice and video delivery.

Energy Saving

With the Energy Efficient Ethernet (EEE) standard, the network will automatically decrease its power usage when traffic is low with no setup required. The switches can also detect the length of connected cables to automatically reduce power usage on shorter cable connections.



EnGenius PoE WLAN Management Smart Switch

Products	Product Description
EWS2910P	8-Port PoE Gigabit WLAN Management Smart Switch and 2 SFP Slots; 61.6W
EWS5912FP	8-Port PoE+ Gigabit WLAN Management Smart Switch, 2 GbE Uplink and 2 SFP Slots; 130W
EWS7928P	24-Port PoE+ Gigabit WLAN Management Smart Switch and 4 SFP Slots; 185W
EWS1200-28TFP	24-Port PoE+ Gigabit WLAN Management Smart Switch and 4 SFP Slots; 410W
EWS7952P	48-Port PoE+ Gigabit WLAN Management Smart Switch and 4 SFP Slots; 410W
EWS7952FP	48-Port PoE+ Gigabit WLAN Management Smart Switch and 4 SFP Slots; 740W

EnGenius PoE WLAN Management Smart Switch series

Models	EWS7952FP	EWS7952P	EWS1200-28TFP	EWS7928P
10/100/1000 Mbps Ports	48	48	24	24
100/1000 Mbps SFP Slots	4	4	4	4
RJ45 Console Port	1	1	1	1
PoE Standard	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at
Total PoE Budget	740W	410W	410W	185W
PoE Capable Port	Ports 1-48	Ports 1-48	Ports 1-24	Ports 1-24
Switching Capacity	104 Gbps	104 Gbps	56 Gbps	56 Gbps
Forwarding Mode	Store-and-Forward	Store-and-Forward	Store-and-Forward	Store-and-Forward
SDRAM	256 MB	256 MB	256 MB	256 MB
Flash Memory	32 MB	32 MB	32 MB	32 MB
Packet Buffer Memory	1.5 MB	1.5 MB	512 KB	512 KB
MAC Address Table Size	8K	8K	8K	8K
Max Managed APs	50	50	50	50

Models	EWS5912FP	EWS2910P
10/100/1000 Mbps Ports	10	8
100/1000 Mbps SFP Slots	2	2
RJ45 Console Port	1	0
PoE Standard	IEEE 802.3af/at	IEEE 802.3af
Total PoE Budget	130W	61.6W
PoE Capable Port	Ports 1-8	Ports 1-8
Switching Capacity	24 Gbps	20 Gbps
Forwarding Mode	Store-and-Forward	Store-and-Forward
SDRAM	256 MB	256 MB
Flash Memory	32 MB	32 MB
Packet Buffer Memory	512 KB	512 KB
MAC Address Table Size	8K	8K
Max Managed APs	50	50

Technical Specifications

Performance

Switching Capacity:

- EWS2910P: 20 Gbps
- EWS5912FP: 24 Gbps
- EWS7928P/EWS1200-28TFP: 56 Gbps
- EWS7952FP / EWS7952P : 104 Gbps

Forwarding Mode: Store-and-Forward

SDRAM: 256 MB

Flash Memory: 32 MB

Packet Buffer Memory:

- EWS2910P/EWS5912FP/EWS7928P/EWS1200-28TFP: 512 KB
- EWS1200-52TP/EWS1200-52TFP: 1.5 MB

Address Database Size: 8,000 MAC Addresses

Network Ports

EWS2910P

8x 10/100/1000 Mbps Ports

2x 100/1000 Mbps SFP Ports

EWS5912FP

10x 10/100/1000 Mbps Ports

2x 100/1000 Mbps SFP Ports

1x RJ45 Console Port

EWS7928P / EWS1200-28TFP

24x 10/100/1000 Mbps Ports

4x 100/1000 Mbps SFP Ports

1x RJ45 Console Port

EWS7952FP / EWS7952P

48x 10/100/1000 Mbps Ports

4x 100/1000 Mbps SFP Ports

1x RJ45 Console Port

PoE Capability

PoE Standard:

- EWS2910P: IEEE 802.3af
- EWS5912FP / EWS7928P / EWS1200-28TFP: IEEE 802.3af/at
- EWS7952FP / EWS7952P : IEEE802.3af/at

PoE Capable Ports:

- EWS2910P: Ports 1~8 / Up to 15W
- EWS5912FP: Ports 1~8 / Up to 30W
- EWS7928P/EWS1200-28TFP: Ports 1~24 / Up to 30W
- EWS7952FP / EWS7952P : Ports 1~48 / Up to 30W

Total PoE Power Budget:

- EWS2910P: 61.6W
- EWS5912FP: 130W
- EWS7928P: 185W
- EWS7952FP / EWS7952P : 410W
- EWS1200-52TFP: 740W

LED Indicators

1 x Power LED

1 x Fault LED

1 x PoE Max LED

1 x LAN Mode LED

1 x PoE Mode LED

Copper Ports: LAN/PoE Mode, Link/Act

SFP Ports: Link/Act, Speed

Software Features

L2 Features

802.3ad Link Aggregation

- Maximum of 8 groups/8 ports per group

Port Mirroring

- One-to-One
- Many-to-One

Spanning Tree Protocol

- 802.1D Spanning Tree Protocol (STP)
- 802.1w Rapid Spanning Tree Protocol (RSTP)
- 802.1s Multiple Spanning Tree Protocol (MSTP)

Static MAC Address

- 256 entries

802.1ab Link Layer Discovery Protocol

IGMP Snooping

- IGMP v1/v2/v3 Snooping
- Supports 256 IGMP Groups
- IGMP per VLAN
- IGMP Snooping Querier
- IGMP Snooping Fast Leave

MLD Snooping

- MLD Snooping v1/v2
- Supports 256 MLD groups
- MLD per VLAN

Jumbo Frame

Technical Specifications

- up to 9216 bytes
802.3x Flow Control
802.3az Energy Efficient Ethernet
VLAN
802.1Q VLAN Tag supported
VLAN Group
- Max 4094 Static VLAN Groups
Voice VLAN
QoS
802.1p Quality of Service
- 8 queues per port
Queue Handling
- Strict
- Weighted Round Robin (WRR)
QoS based on
- 802.1p Priority
- DSCP
Bandwidth Control
- Port-based (Ingress/Egress, 64 Mbps~1000Mbps)
Broadcast/Unknown Multicast/ Unknown Unicast Storm Control
Access Control List (ACL)
Layer 2/3
- Supports Max. 50 Entries (ACL)
- Supports Max. 256 Entries (ACE)
ACL based on
- MAC Address
- VLAN ID
- 802.1p Priority
- Ethertype
- IP Address
- Protocol Type
- DSCP
Security
802.1X
- Guest VLAN
- Port-based Access Control
Supports RADIUS Authentication
Port Security
- up to 256 MAC Addresses per Port
Port Isolation

DoS Attack Prevention
BPDU Attack Prevention
Monitoring
Port Statistics
System Log
RMON
Management
Web Graphical User Interface (GUI)
Command Line Interface (CLI)
BootP/DHCP Client/DHCPv6 Client
SSH Server
Telnet Server
TFTP Client
HTTPS
SNMP
- Supports v1/v2c/v3
SNMP Trap
SNTP
Configuration Restore/Backup
Dual Images
Diagnostic
Cable Diagnostic
Ping Test
Trace Route
WLAN Controller Features
Manage up to 50 Neutron Access Points
Access Point Auto Discovery and Provisioning
Access Point Auto IP Assignment
Access Point Group Management
Remote Access Point Rebooting
Access Point Device Name Editing
Access Point Radio Settings
Band Steering
Traffic Shaping
Fast Handover
Fast Roaming
Access Point Client Limiting
Client Fingerprinting
Wireless Security (WEP, WPA/WPA2 Enterprise, WPA/WPA2 PSK)
AP VLAN Management

Technical Specifications

VLANs for Access Point- Multiple SSIDs
Secured Guest Network
Captive Portal
Access Point Status Monitoring
Rogue AP Detection
Wireless Client Monitoring
Background Scanning
Email Alert
Wireless Traffic & Usage Statistics
Real-time Throughput Monitoring
Visual Topology View
Floor Plan View
Map View
Wireless Coverage Display
Local MAC Address Database
Remote MAC Address Database (RADIUS)
Unified Configuration Import / Export
Bulk Firmware Upgrade Capability
One-Click Update
Intelligent Diagnostics
Kick/Ban Clients

Environmental Specifications
Temperature Range
Operating Temperature
- EWS2910P: 0 to 40°C
EWS5912FP / EWS7928P / EWS1200-28TFP/ **EWS7952P / EWS7952FP : 0 to 50℃**
Storage Temperature
-20°C to 70°C
Humidity
5% ~ 95%

Physical Specifications
EWS2910P
Weight: 0.62kg
Dimensions (W x D x H): 240 x 105 x 27 mm
EWS5912FP
Weight: 1.9kg
Dimensions (W x D x H): 330 x 230 x 44 mm
EWS7928P
Weight: 3.6kg
Dimensions (W x D x H): 440 x 260 x 44 mm
EWS1200-28TFP
Weight: 3.8kg
Dimensions (W x D x H): 440 x 260 x 44 mm
EWS7952P
Weight: TBD
Dimensions (W x D x H): 440 x 410 x 44 mm
EWS7952FP
Weight: TBD
Dimensions (W x D x H): 440 x 410 x 44 mm

Package Content
EWS2910P
- EnGenius Switch
- Power Adapter
- Wall-mount Kit
- Quick Installation Guide
EWS5912FP / EWS7928P / EWS1200-28TFP / EWS7952P/ EWS7952FP
- EnGenius Switch
- Power Cord
- Rack-mount Kit
- Quick Installation Guide

HQ , Taiwan
www.engeniusnetworks.com
Costa Mesa, California, USA | (+1) 714 432 8668
www.engeniustech.com
Dubai, UAE | (+971) 4 357 5599
www.engenius-me.com

Singapore | (+65) 6227 1088
www.engeniustech.com.sg
Miami, USA | (+1) 305 887 7378
pg.engeniustech.com eg.engeniustech.com
Eindhoven, Netherlands | (+31) 40 8200 888
www.engeniusnetworks.eu

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