The Neutron Series
Distributed Network Management Solution

PoE Gigabit Managed Smart Switch with WLAN Controller

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

The EnGenius Neutron PoE Gigabit Managed Smart Switches with WLAN Controller 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 802.3at/at to increase network flexibility. Add devices to the existing network infrastructure without additional wire planning or reorganizing of the original network design.
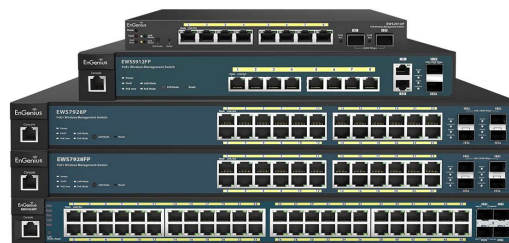
Features

> 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^{TM}

> 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.
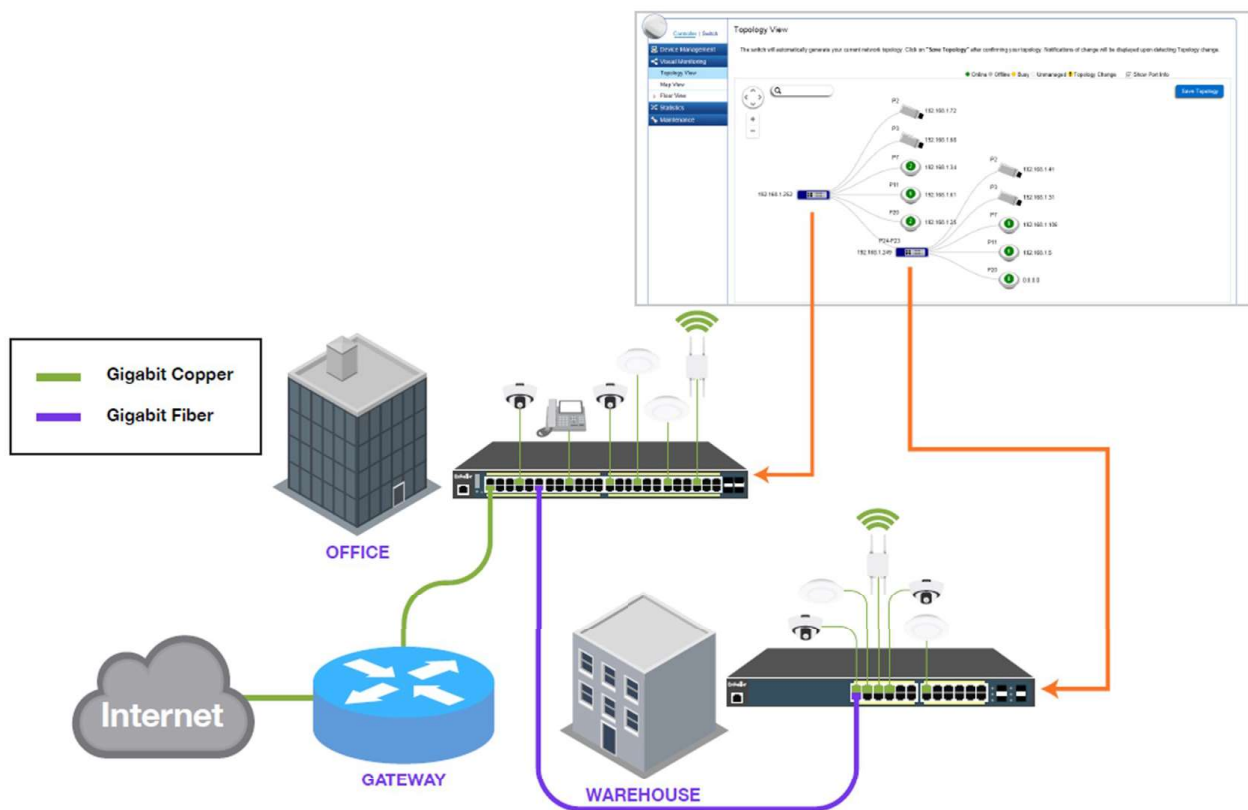
EnGenius PoE Managed Smart Switch with Wireless Controller

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

EnGenius PoE Managed Smart Switch with Wireless Controller

Models	EWS7952FP	EWS1200-28TFP	EWS7928P	EWS5912FP
10/100/1000 Mbps Ports	48	24	24	10
100/1000 Mbps SFP Slots	4	4	4	2
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	185W	130W
PoE Capable Port	Ports 1-48	Ports 1-24	Ports 1-24	Ports 1-8
Switching Capacity	104 Gbps	56 Gbps	56 Gbps	24 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	512 KB	512 KB	512 KB
MAC Address Table Size	8K	8K	8K	8K
Max Managed APs	50	50	50	50

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

Technical Specifications

Performance

Switching Capacity:

- EWS2910P: 20 Gbps

- EWS5912FP: 24 Gbps

- EWS7928P/EWS1200-28TFP: 56 Gbps

- EWS7952FP: 104 Gbps

Forwarding Mode: Store-and-Forward

SDRAM: 256 MB

Flash Memory: 32 MB

Packet Buffer Memory:

- EWS2910P/EWS5912FP/EWS7928P/EWS1200-28TFP: 512 KB

- EWS7952FP: 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

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 / EWS7952FP: IEEE 802.3af/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: Ports 1~48 / Up to 30W

Total PoE Power Budget:

- EWS2910P: 61.6W

- EWS5912FP: 130W

- EWS7928P: 185W

- EWS1200-28TFP: 410W

- EWS7952FP: 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 / EWS7952FP: 0 to 50°C

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

EWS7952FP

Weight: 6.4kg

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 / EWS7952FP

- EnGenius Switch

- Power Cord

- Rack-mount Kit

- Quick Installation Guide