



# 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 EWS2910P Neutron PoE Gigabit Managed Smart Switches with WLAN Controller featuring 10 PoE Gigabit ports and 2 SFP Fiber slots that 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-scale 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 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 Power-over-Ethernet support providing flexibility and simplicity for device deployment
- > Network Troubleshooting, Monitoring, & Email Alerts
- > Configure, manage & monitor up to 50 locally Access Point throughout EWS switch controllers
- > Centrally manage wired & wireless networks throughout 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 Devices Management

Quickly discover, configure, and monitor Neutron EWS Access Points, EnTurbo 11AC Wave2 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

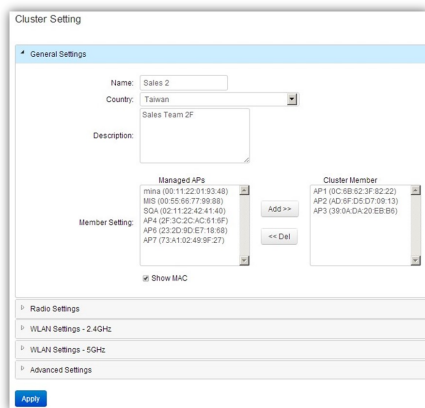
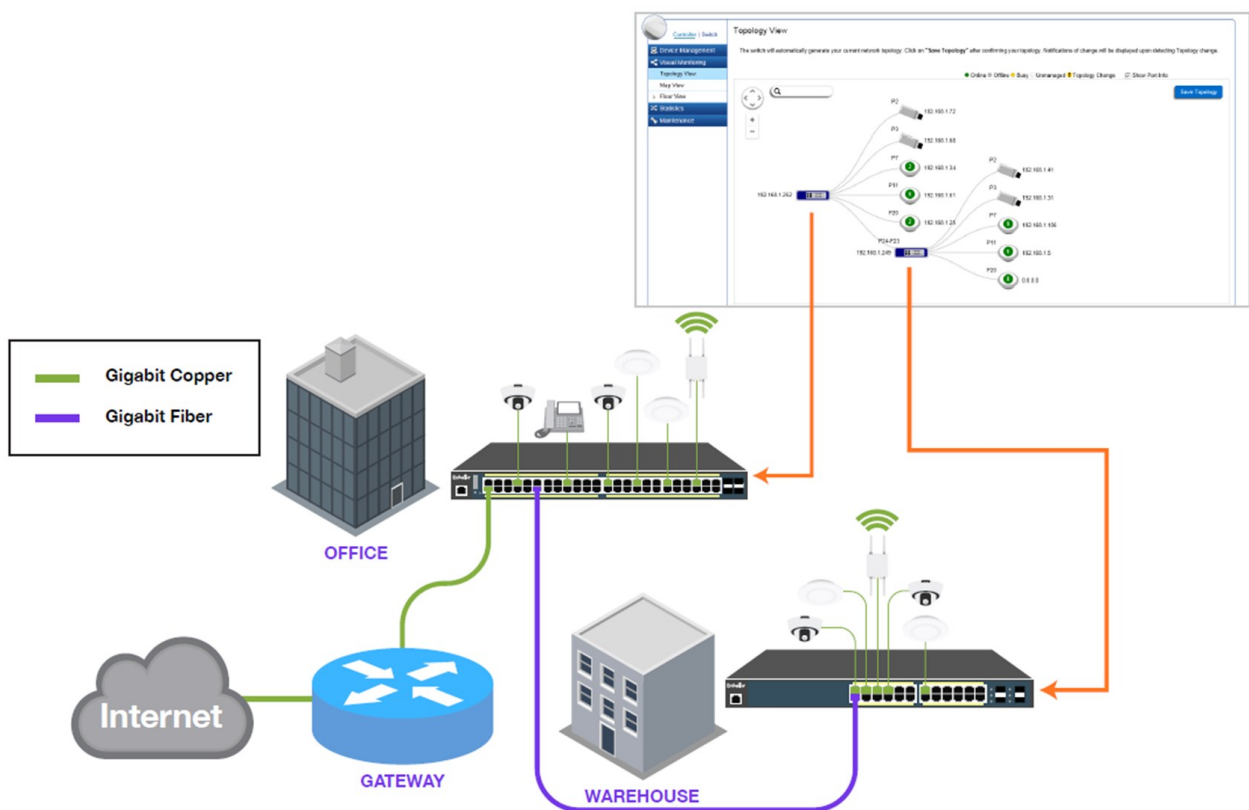
Remotely manage Neutron EWS Access Points, Switches, and IP Cameras through ezMaster Network Management Software. Centrally manage hundreds of EWS devices across the network regardless of its size or location with no licensing or subscription fees.

## VLAN/Voice & Quality of Service

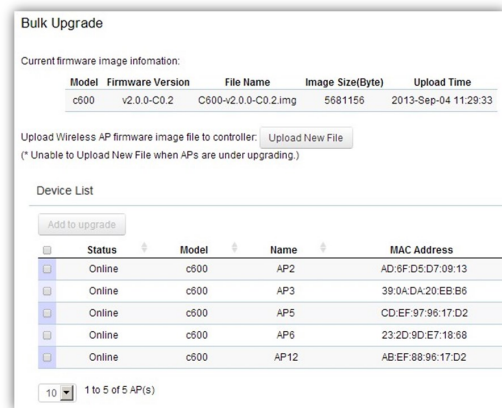
Segment the network by departments or traffic types for increased performance and security with 802.1Q VLAN. Prioritize compliant VoIP and video traffic using 802.1p Class of Service (CoS) ensuring high bandwidth, time-sensitive data is forwarded immediately for clear, smooth voice and video delivery.

## 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.



**Cluster Setting:** Assign APs to clusters for group configuration



**Bulk Upgrading:** Hassle-free AP firmware upgrading

## Technical Specifications

### Performance

Switching Capacity: 24Gbps

Forwarding Mode: Store-and-Forward

SDRAM: 256 MB

Flash Memory: 32 MB

Packet Buffer Memory: 512 KB

Address Database Size: 8,000 MAC Addresses

### Network Ports

10x 10/100/1000 Mbps Ports

2x 100/1000 Mbps SFP Ports

### PoE Capability

PoE Standard: 802.3af

PoE Capable Ports: Ports 1~8 / Up to 15.4W

Total PoE Power Budget: 61.6W

### 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

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: 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

## Technical Specifications

Port Isolation	Client Fingerprinting
DoS Attack Prevention	Wireless Security (WPA2 Enterprise, WPA2 PSK)
BPDU Attack Prevention	AP VLAN Management
<b>Monitoring</b>	VLANs for Access Point- Multiple SSIDs
Port Statistics	Captive Portal Per SSID*
System Log	Access Point Status Monitoring
RMON	Rogue AP Detection
<b>Management</b>	Wireless Client Monitoring
Web Graphical User Interface (GUI)	Background Scanning
Command Line Interface (CLI)	Email Alert Notification
BootP/DHCP Client/DHCPv6 Client	Wireless Traffic & Usage Statistics
SSH Server	Real-time Throughput Monitoring
Telnet Server	Visual Topology View
TFTP Client	Floor Plan View
HTTPS	Map View
SNMP: v1/v2c/v3	Wireless Coverage Display
SNMP Trap	Local MAC Address Database
SNTP	Remote MAC Address Database (RADIUS)
Configuration Restore/Backup	Unified Configuration Import / Export
Dual Images	Bulk Firmware Upgrade Capability
<b>Diagnostic</b>	One-Click Update
Cable Diagnostic	Intelligent Diagnostics
Ping Test	Kick/Ban Clients
Trace Route	<b>Environmental Specifications</b>
<b>WLAN Controller Features</b>	<b>Temperature Range</b>
Manage up to 50 Neutron Access Points	Operating Temperature: 0 - 40°C
Access Point Auto Discovery and Provisioning	Storage Temperature: -20°C to 70°C
Access Point Auto IP Assignment	<b>Humidity</b>
Access Point Group Management	5% ~ 95% (Non-Condensing)
Remote Access Point Rebooting	<b>Physical Specifications</b>
Access Point Device Name Editing	Weight: 1.9kg
Access Point Radio Settings	Dimensions (W x D x H): 330 x 230 x 44 mm
Kick/Ban Clients	<b>Certification</b>
Wireless Traffic Shaping Per User / Per SSID	EN 55032+EN55024
RSSI Threshold Per Radio	FCC Subpart 15B
Enable Access Points by set scheduler	EN 61000-3
Reboot Access Points by set scheduler	EN61000-4
Remote Log*	AS/NZS CISPR 22
Fast Roaming	ICES-003 Issue5
Access Point Client Limiting	

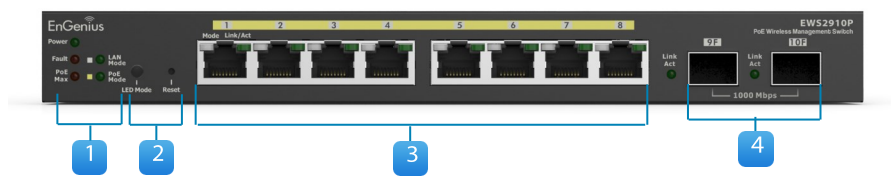
\* Functions will be available throughout upgrading firmware in April, 2018.

## Technical Specifications

### Package Content

- EnGenius Switch
- Power Adapter
- Rack-mount Kit
- Quick Installation Guide

## Physical Interfaces



1. LED Indicators
2. Mode Selector & Reset button
3. PoE RJ45 Ethernet Ports
4. Dual-Speed SFP Slots

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