EnGenius

Datasheet

EWS2908P

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 **EWS2908P** Neutron PoE Gigabit Managed Smart Switches with WLAN Controller featuring 8 PoE Gigabit ports 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
- 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

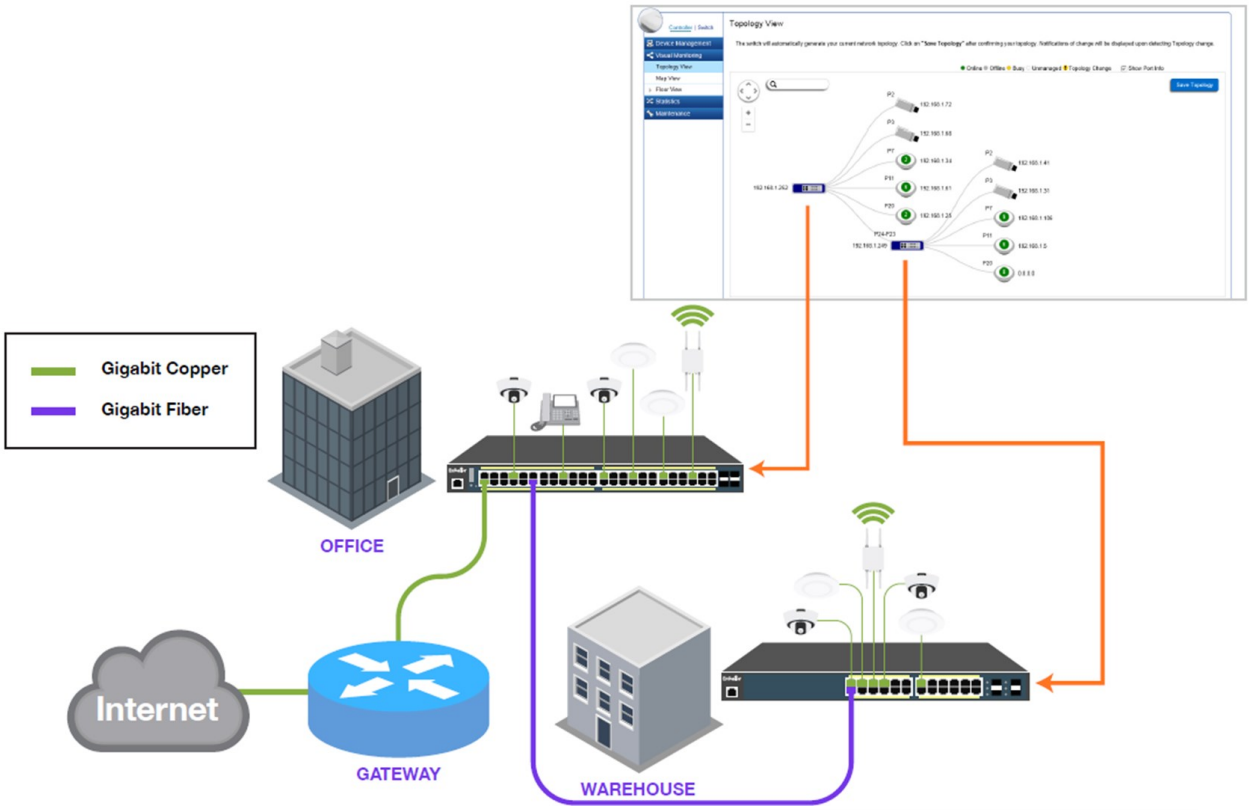
Remotely manage Neutron EWS Access Points, Switches, and IP Cameras through ezMaster Network Management Software. Centrally manage hundreds of EWS devices across the network regardless of its size or location with no licensing or subscription fees.

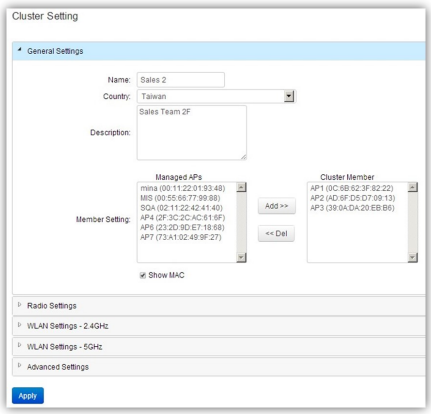
VLAN/Voice & Quality of Service

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.

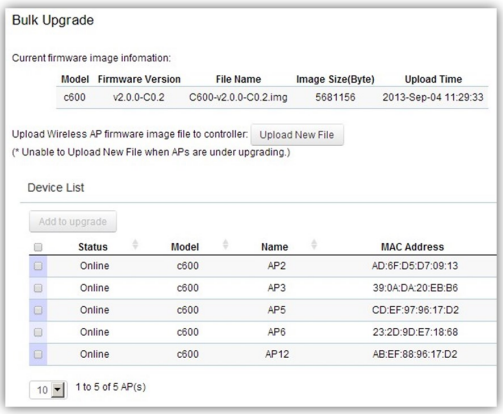
Energy Saving

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: 16Gbps

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

8x 10/100/1000 Mbps 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

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

- Ether type

- 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
DoS Attack Prevention
BPDU Attack Prevention
Monitoring
Port Statistics
System Log
RMON
Management
Web Graphical User Interface (GUI)
Command Line Interface (CLI)
Boot/DHCP Client/DHCPv6 Client
SSH Server
Telnet Server
TFTP Client
HTTPS
SNMP: 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
Kick/Ban Clients
Wireless Traffic Shaping Per User / Per SSID
RSSI Threshold Per Radio
Enable Access Points by set scheduler
Reboot Access Points by set scheduler
Remote Log
Fast Roaming
Access Point Client Limiting

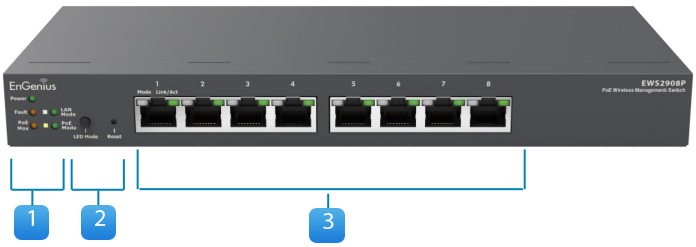
Client Fingerprinting
Wireless Security (WPA2 Enterprise, WPA2 PSK)
AP VLAN Management
VLANs for Access Point- Multiple SSIDs
Captive Portal Per SSID
Access Point Status Monitoring
Rogue AP Detection
Wireless Client Monitoring
Background Scanning
Email Alert Notification
Wireless Traffic & Usage Statistics
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: 0 - 40°C
Storage Temperature: -20°C to 70°C
Humidity
5% ~ 95% (Non-Condensing)
Physical Specifications
Weight: 622 g
Dimensions (W x D x H): 330 x 230 x 44 mm
Certification
EN 55032+EN55024
FCC Subpart 15B
EN 61000-3
EN61000-4
AS/NZS CISPR 22
ICES-003 Issue5

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

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Version 1.2— 14/10/2018