

**Neutron PoE Switch Series** 

### 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<sup>TM</sup>
- > 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

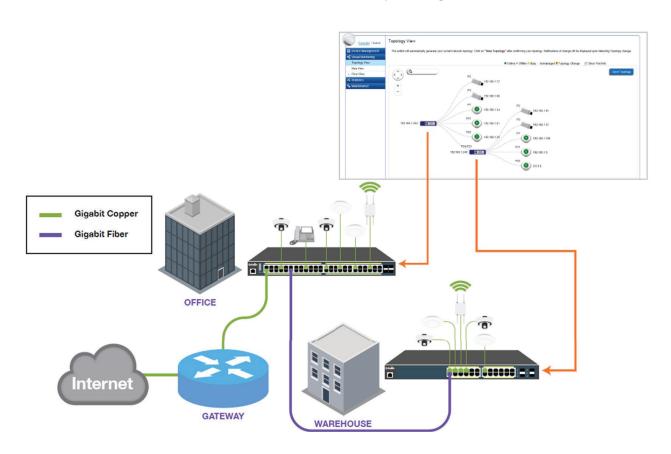
Remotely manage Neutron EWS Access Points, Switches, and IP Cameras through ezMaster Network Management Software. Centrally manage hundreds of EWS devices across the network regardless of its size or location with no licensing or subscription fees.

#### **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**

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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

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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	PoE Capable Ports:		
Switching Capacity:	- EWS2910P: Ports 1~8 / Up to 15W		
- EWS2910P: 20 Gbps	- EWS5912FP: Ports 1~8 / Up to 30W		
- EWS5912FP: 24 Gbps	- EWS7928P/EWS1200-28TFP: Ports 1~24 / Up to 30W		
- EWS7928P/EWS1200-28TFP: 56 Gbps	- EWS7952FP / EWS7952P : Ports 1~48 / Up to 30W		
- EWS7952FP / EWS7952P : 104 Gbps	Total PoE Power Budget:		
Forwarding Mode: Store-and-Forward	- EWS2910P: 61.6W - EWS7952FP / EWS7952P : 410W		
Forwarding rate :	- EWS5912FP: 130W - EWS1200-52TFP: 740W		
- EWS7952P / EWS7952FP : 77.376Mpps	- EWS7928P: 185W		
- EWS7928P / EWS1200-28TFP : 41.664Mpps			
- EWS5912FP : 17.856Mpps	LED Indicators		
- EWS2910P : 14.88Mpps	1 x Power LED 1 x PoE Mode LED		
SDRAM: 256 MB	1 x Fault LED Copper Ports: LAN/PoE Mode, Link/Act		
Flash Memory: 32 MB	1 x PoE Max LED SFP Ports: Link/Act, Speed		
Packet Buffer Memory:	1 x LAN Mode LED		
- EWS2910P/EWS5912FP/EWS7928P/EWS1200-28TFP: 512 k	KB		
- EWS7952FP / EWS7952P : 1.5MB	Software Features		
Address Database Size: 8,000 MAC Addresses	L2 Features		
	802.3ad Link Aggregation		
Network Ports	- Maximum of 8 groups/8 ports per group		
EWS2910P	Port Mirroring		
8x 10/100/1000 Mbps Ports	- One-to-One		
2x 100/1000 Mbps SFP Ports	- Many-to-One		
EWS5912FP	Spanning Tree Protocol		
10x 10/100/1000 Mbps Ports	- 802.1D Spanning Tree Protocol (STP)		
2x 100/1000 Mbps SFP Ports	- 802.1w Rapid Spanning Tree Protocol (RSTP)		
1x RJ45 Console Port	- 802.1s Multiple Spanning Tree Protocol (MSTP)		
EWS7928P / EWS1200-28TFP	Static MAC Address		
24x 10/100/1000 Mbps Ports	- 256 entries		
4x 100/1000 Mbps SFP Ports	802.1ab Link Layer Discovery Protocol		
1x RJ45 Console Port	IGMP Snooping		
EWS7952FP / EWS7952P	- IGMP v1/v2/v3 Snooping		
48x 10/100/1000 Mbps Ports	- Supports 256 IGMP Groups		
4x 100/1000 Mbps SFP Ports	- IGMP per VLAN		
1x RJ45 Console Port	- IGMP Snooping Querier		
	- IGMP Snooping Fast Leave		
PoE Capability	MLD Snooping		
PoE Standard:	- MLD Snooping v1/v2		
- EWS2910P: IEEE 802.3af	- Supports 256 MLD groups		
- EWS5912FP / EWS7928P / EWS1200-28TFP: IEEE 802.3af/a	- MLD per VLAN		
- EWS7952FP / EWS7952P : IEEE802.3af/at	Jumbo Frame		

### **Technical Specifications**

- up to 9.6K bytes	DoS Attack Prevention	
802.3x Flow Control	BPDU Attack Prevention	
802.3az Energy Efficient Ethernet	Monitoring	
VLAN	Port Statistics	
802.1Q VLAN Tag supported	System Log	
VLAN Group	RMON	
- Max 4094 Static VLAN Groups	Management	
Voice VLAN	Web Graphical User Interface (GUI)	
QoS	Command Line Interface (CLI)	
802.1p Quality of Service:	BootP/DHCP Client/DHCPv6 Client	
- 8 queues per port	SSH Server	
Queue Handling	Telnet Server	
- Strict	TFTP Client	
- Weighted Round Robin (WRR)	HTTPS	
CoS based on:	SNMP	
- 802.1p Priority, DSCP, TOS	- Supports v1/v2c/v3	
- Physical port	SNMP Trap	
Bandwidth Control	SNTP	
- Port-based (Ingress/Egress, 64 Mbps~1000Mbps)	Configuration Restore/Backup	
Broadcast/Unknown Multicast/ Unknown Unicast Storm Control	Dual Images	
Access Control List (ACL)	Diagnostic	
Layer 2/3	Cable Diagnostic	
- Supports Max. 50 Entries (ACL)	Ping Test	
- Supports Max. 256 Entries (ACE)	Trace Route	
ACL based on	WLAN Controller Features	
- MAC Address	Manage up to 50 Neutron Access Points	
- VLAN ID	Access Point Auto Discovery and Provisioning	
- 802.1p Priority	Access Point Auto IP Assignment	
- Ethertype	Access Point Group Management	
- IP Address	Remote Access Point Rebooting	
- Protocol Type	Access Point Device Name Editing	
- DSCP	Access Point Radio Settings	
Security	Band Steering	
802.1X	Traffic Shaping	
- Guest VLAN	Fast Handover	
- Port-based Access Control	Fast Roaming	
Supports RADIUS Authentication	Access Point Client Limiting	
Port Security	Client Fingerprinting	
- up to 256 MAC Addresses per Port	Wireless Security (WEP, WPA/WPA2 Enterprise, WPA/WPA2 PSK)	
Port Isolation	AP VLAN Management	

### **Technical Specifications**

VLANs for Access Point- Multiple SSIDs	Physical Specifications	
Secured Guest Network	EWS2910P	
Captive Portal	Weight: 0.62kg	
Access Point Status Monitoring	Dimensions (W x D x H): 240 x 105 x 27 mm	
Rogue AP Detection	EWS5912FP	
Wireless Client Monitoring	Weight: 1.9kg	
Background Scanning	Dimensions (W x D x H): 330 x 230 x 44 mm	
Email Alert	EWS7928P	
Wireless Traffic & Usage Statistics	Weight: 3.6kg	
Real-time Throughput Monitoring	Dimensions (W x D x H): 440 x 260 x 44 mm	
Visual Topology View	EWS1200-28TFP	
Floor Plan View	Weight: 3.8kg	
Map View	Dimensions (W x D x H): 440 x 260 x 44 mm	
Wireless Coverage Display	EWS7952P	
Local MAC Address Database	Weight: TBD	
Remote MAC Address Database (RADIUS)	Dimensions (W x D x H): 440 x 410 x 44 mm	
Unified Configuration Import / Export	EWS7952FP	
Bulk Firmware Upgrade Capability	Weight: TBD	
One-Click Update	Dimensions (W x D x H): 440 x 410 x 44 mm	
Intelligent Diagnostics	· · · · · · · · · · · · · · · · · · ·	
Kick/Ban Clients	Package Content	
	EWS2910P	
Environmental Specifications	- EnGenius Switch	
Temperature Range	- Power Adapter	
Operating Temperature	- Wall-mount Kit	
- EWS2910P: 0 to 40°C	- Quick Installation Guide	
EWS5912FP / EWS7928P / EWS1200-28TFP/EWS7952P / EWS7952FP : 0 to 50°C	EWS5912FP / EWS7928P / EWS1200-28TFP / EWS7952P/	
Storage Temperature	EWS7952FP	
EWS5912P/ EWS7928P / EWS1200-28TFP/ EWS7952P/ EWS7952FP	- EnGenius Switch	
20°C to 70°C (with Fan built-in)	- Power Cord	
Humidity	- Rack-mount Kit	
5% ~ 95%	- Quick Installation Guide	

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