The Neutron Series
Distributed Network Management Solution

Gigabit Managed Smart Switch with Wireless Controller

Best Value Managed Smart Switches

The EnGenius EWS1200 Gigabit Managed Smart Switch family is introduced to provide a new network expanding solution under Neutron Series which includes EWS1200D-10T, EWS1200-28T and EWS1200-52T. Three different port options, 8-, 24-, and 48-port, are available for various deployment needs from small businesses to enterprise businesses which are equipped with Gigabit connectivity to provide power source for a variety of devices. With rich L2 management manageability featured, IT managers, VARs, and MSPs can take the advantage of quick deployment, simplified maintenance, and seamless upgrades with lower total cost of ownership making it a lucrative solution for businesses looking for the best combination of features, performance and value.

Rich-featured Layer 2 Manageability

The EnGenius EWS1200 family includes Layer 2 switching features such as IGMP Snooping, MLD Snooping, Port Mirroring, Rapid Spanning Tree, Multiple Spanning Tree, Spanning Tree, VLAN group, Voice VLAN, ACL, 802.1X port security, SNMP v1/ v2c/v3 and IEEE802.3ad Link Aggregation Control Protocol (LACP). The IEEE 802.3x Flow Control function allows servers to directly connect to the switch for fast, reliable data transfer. Network maintenance features include Spanning Tree and Cable Diagnostics. IT managers, VARs, and MSPs who are expanding network deployments for businesses, schools, resorts and hotels, or other expansive venues can expect superior performance and reliability at a value price point that is much more attractive than from larger, more enterprise focused network brands.

Simplifying WLAN Management

Besides its powerful Layer 2 switch features, the EWS1200 also excels as a full featured wireless controller, capable of managing up to 50 Neutron APs. Neutron Switches can automatically discover any supported EnGenius APs connected to the network with a simple click of a mouse, self-configure and become instantly manageable. Simply log into the device via a web browser and assign APs into cluster groups. Wireless Radio, Wireless Security and other AP configurations can all be easily applied to multiple APs simultaneously, eliminating the time consuming process of configuring each and every wireless AP individually. Any organization with limited IT engineer and budget can create a stable and secure wireless network in no time. Without additional costs or license purchasing necessary, network administrators can manage and monitor both wired and wireless nodes through a single web interface.

Features

- 10/100/1000 Mbps Gigabit Ethernet Ports
- Dedicated SFP slots for longer connectivity via fiber uplinks and for uplink redundancy and failover
- Manage and monitor up to 50 wireless APs
- IGMP and MLD snooping provides advanced multicast filtering
- IEEE802.3ad Link Aggregation
- STP/RSTP/MSTP
- Access Control List/ Port Security
- IEEE802.1X and RADIUS Authentication
- SNMP v1/v2c/v3
- Voice VLAN for fast and reliable deployment of VoIP
- Energy Efficient Ethernet (IEEE802.3az) support for better energy saving when more EEE-compliant end devices are available in the market
- Advanced QoS with IPv4/IPv6 ingress traffic filtering (ACLs) and prioritization
- Easy to manage via Web-Based Management GUI for switch deployment
- Standard-based technology, ensuring interoperability with any standard-based devices in the existing network
- Dual firmware images, improving reliability and uptime for your network
- ezMaster compatible

Easy Network Management and Visibility

EWS1200 family Switches are designed for easy network management and can be quickly added to an existing rack of other branded L2 and L3 switches. Configuring the switch can be made through an intuitive and user-friendly Web interface for efficient management. The Switch also includes SNMP (v1, v2c and v3) to collect and track data for network health monitoring, device management, and easily critical IT controls and policy enforcement. The Link Layer Discovery Protocol (LLDP) feature allows family switches and other connecting network devices to announce and display their identity and capabilities on the local network, which helps IT managers better manage, troubleshoot or correct issues that may arise within the network.

VLAN and Voice VLAN

EWS1200 family Switches support 802.1Q VLANs for convergence improvement and bandwidth utilization. The switch automates the process of setting up VoIP devices on a network. Voice VLAN guarantees clear quality and efficient transmission for all voice communications. VLANs also provide a means of securing each broadcast domain, segregating them from each other. VLANs can be configured to segment departmental resources. VLANs implemented on an SMB network help to restrict access to sensitive information from one department to another.

Making the Network More Secure

The EWS1200 family switches also support 802.1X port-based authentication, so IT managers can authenticate clients via external RADIUS servers. In addition, the Access Control List (ACL) feature enhances network security and protects the network by screening traffic from unauthorized MAC or IP addresses.

Multicast Support

The EWS1200 family supports IGMP Snooping, MLD Snooping, and VLAN for multicast applications. By passively snooping IGMP packets transferred between the switch and the IP multicast host, registration information is recorded and sorted into multicast groups. The switch can then intelligently forward traffic to specified ports that request multicast traffic. MLD Snooping enhances efficiency in selective distribution by forwarding IPv6 multicast data to receiving ports, rather than flooding all ports in a VLAN.

QoS for Smoother Video Conferences and Clearer Phone Calls

Priority queueing ensures high-priority traffic being delivered efficiently, even encountering congestion from high traffic bursts. The ability to prioritize traffic makes it possible to provide quality of latency-sensitive services and applications in despite of increasing traffic loads. For mission critical environments, 802.1D, 802.1w and 802.1s Spanning Tree Protocols (STP) can benefit users to configure the switch with a redundant backup bridge path so transmission and reception of packets can be guaranteed in the event of any failed switch on the network. To create a streamlined network, 802.1p Priority Tagging places a priority tag in a specified frame to be identified from the queue once received and to be recognized for giving priority ahead of other frames. IEEE 802.1p enables administrators to assign and designate traffic priority that assures of applications quality such as clear and jitter-free VoIP and video conferencing.

Energy Saving

The EnGenius EWS1200 family is capable of conserving power without sacrificing operation performance. 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 Managed Smart Switch with Wireless Controller

Products	Product Description
EWS1200D-10T	8-Port Gigabit Managed Smart Switch with Wireless Controller and 2 Dual-Speed SFP Slots
EWS1200-28T	24-Port Gigabit Managed Smart Switch with Wireless Controller and 4 Dual-Speed SFP Slots
EWS1200-52T	48-Port Gigabit Managed Smart Switch with Wireless Controller and 4 Dual-Speed SFP Slots

Models	EWS1200-52T	EWS1200-28T	EWS1200D-10T
10/100/1000 Mbps Ports	48	24	8
100/1000 Mbps SFP Slots	4	4	2
RJ45 Console Ports	1	1	0
Switching Capacity	104 Gbps	56 Gbps	20 Gbps
Forwarding Mode	Store-and-Forward	Store-and-Forward	Store-and-Forward
SDRAM	256 MB	256 MB	256 MB
Flash Memory	32 MB	32 MB	32 MB
Packet Buffer Memory	1.5 MByte	512 Kbyte	512 Kbyte
Address Database Size	8000 MAC Addresses	8000 MAC Addresses	8000 MAC Addresses
Managed APs	50	50	50

Technical Specifications

LED Indicators	- Maximum of 8 groups/8 ports per group
Device	Port Mirroring
Power LED	- One-to-One
Fault LED	- Many-to-One
Interface	Spanning Tree Protocol
Link/Activity/Speed (per Ethernet port)	- 802.1D Spanning Tree Protocol (STP)
Link/Activity/Speed (per SFP slot)	- 802.1w Rapid Spanning Tree Protocol (RSTP)
	- 802.1s Multiple Spanning Tree Protocol (MSTP)
Software Features	MAC Address Table
L2 Features	- 8K entries
802.3ad Link Aggregation	Static MAC Address

Technical Specifications

- 256 entries	**Access Control List (ACL)**
802.1ab Link Layer Discovery Protocol	Layer 2/3
IGMP Snooping	- Supports Max. 50 Entries (ACL)
- IGMP v1/v2/v3 Snooping	- Supports Max. 256 Entries (ACE)
- Supports 256 IGMP Groups	ACL based on
- IGMP per VLAN	- MAC Address
- IGMP Snooping Querier	- VLAN ID
- IGMP Snooping Fast Leave	- 802.1p Priority
MLD Snooping	- Ethertype
- MLD Snooping v1/v2	- IP Address
- Supports 256 MLD groups	- Protocol Type
- MLD per VLAN	- DSCP
Jumbo Frame	**Security**
- up to 9216 bytes	802.1X
802.3x Flow Control	- Guest VLAN
802.3az Energy Efficient Ethernet	- Port-based Access Control
VLAN	Supports RADIUS Authentication
802.1Q VLAN Tag supported	Port Security
VLAN Group	- up to 256 MAC Addresses per Port
- Max 4094 Static VLAN Groups	Port Isolation
Voice VLAN	DoS Attack Prevention
QoS	BPDU Attack Prevention
802.1p Quality of Service	**Monitoring**
- 8 queues per port	Port Statistics
Queue Handling	System Log
- Strict	RMON
- Weighted Round Robin (WRR)	**Management**
QoS based on	Web Graphical User Interface (GUI)
- 802.1p Priority	Command Line Interface (CLI)
- DSCP	BootP/DHCP Client/DHCPv6 Client
Bandwidth Control	SSH Server
- Port-based (Ingress/Egress, 64 Mbps~1000Mbps)	Telnet Server
Broadcast/Unknown Multicast/ Unknown Unicast Storm Control	TFTP Client

Technical Specifications

Management (Continued)
HTTPS
SNMP
- Supports v1/v2c/v3
SNMP Trap
SNTP
Configuration Restore/Backup
Dual Images
Diagnostic
Cable Diagnostic
Ping Test
Trace Route
MIB/RFC Standards
RFC1213
RFC1493
RFC1757
RFC2674
RF2863
Wireless Management Features
Manage up to 50 Neutron Access Points
Access Point Auto Discovery and Provisioning
Access Point Auto IP Assignment
Access Point Cluster 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
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
Secure Control Messaging (SSL Certificate)
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 to 40°C (EWS1200D-10T)
- 0 to 50°C (EWS1200-28T/EWS1200-52T)
Storage Temperature
-20°C to 70°C
Humidity
5% ~ 95%

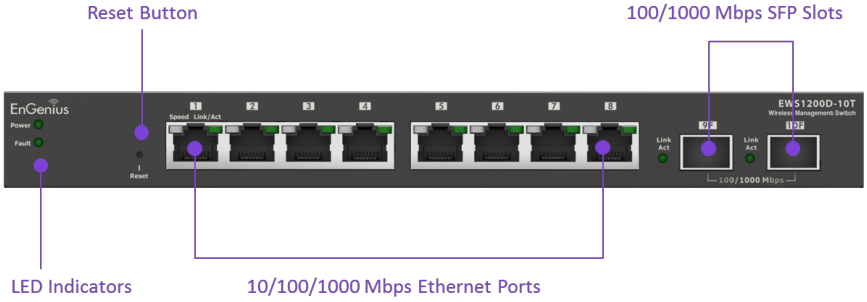
Technical Specifications

Package Content
EWS1200D-10T
EnGenius Switch
Power Adapter
Wall-mount Kit
Quick Installation Guide
EWS1200-28T & EWS1200-52T
EnGenius Switch
Power Cord
Rack-mount Kit
Quick Installation Guide

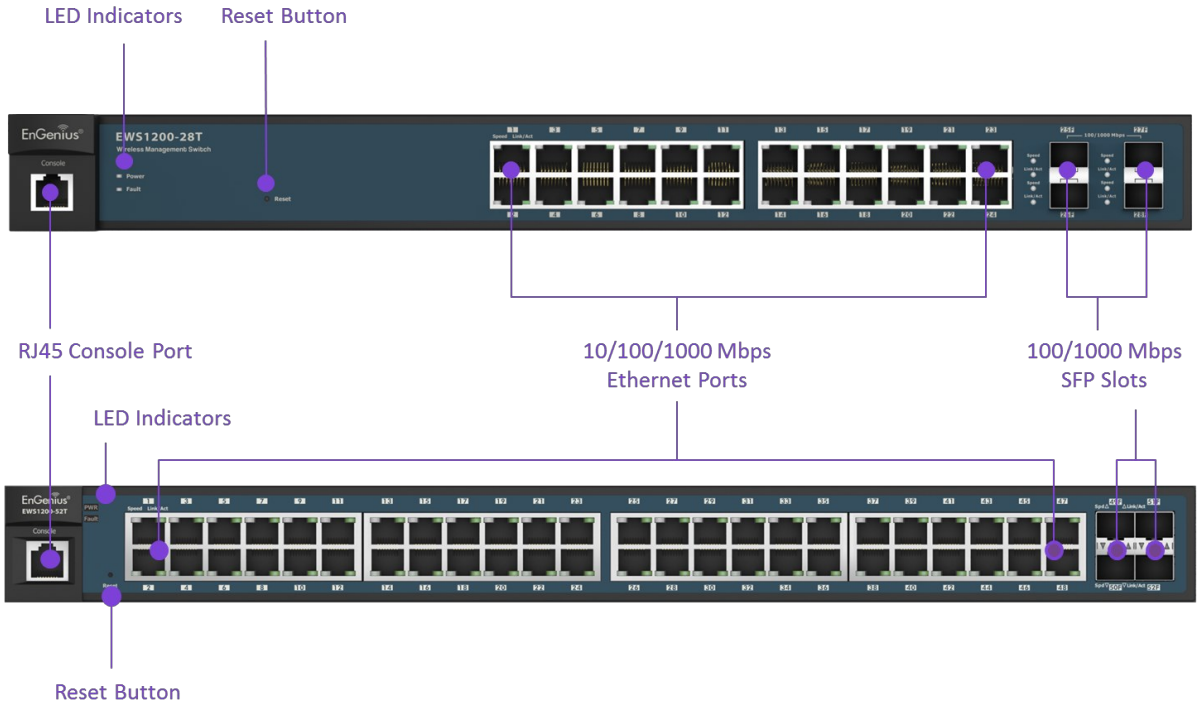
Physical Specifications
EWS1200D-10T
Weight: 0.61kg
Dimensions (W x D x H): 240 x 105 x 27 mm
EWS1200-28T
Weight: 3.01kg
Dimensions (W x D x H): 440 x 260 x 44 mm
EWS1200-52T
Weight: 3.68kg
Dimensions (W x D x H): 440 x 260 x 44 mm

Interface

EWS1200D-10T



EWS1200-28T & EWS1200-52T



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