FnGenius

EWS7928P Datasheet



Key Features

- Manage and monitor up to 50 Wireless APs
- Comprehensive L2 Switch Features
- 24 Gigabit ports with IEEE802.3af/at PoE support
- Access Point Auto Discovery & Provisioning
- Access Point Cluster Management
- Topology View / Floor Plan View / Map View
- Intelligent AP Diagnostic & Troubleshooting
- Centralized Bulk AP Firmware Upgrade
- 4 SFP Uplink Slots for additional connectivity
- Internal Power Supply with 185w PoE Budget

24-Port Gigabit PoE+ L2 Wireless Management Switch with 4 Dual-Speed SFP

Wireless Management made easy: EnGenius EWS Wireless Management Switch Series takes wired/wireless network switching to a whole new level

EnGenius EWS7928P is an affordable centralized wired/wireless management system developed specifically for entry-level small-to-medium businesses. This powerful device can be easily deployed and operated by non-tech experts and installed effortless and quickly. Any organization with limited IT engineer and budget can create a stable and secure wireless network in no time. With no additional costs or license purchasing necessary, network administrators can manage and monitor both wired and wireless nodes through a single web interface. The EWS7928P can manage up to 50 wireless APs and provides easy-to-setup Wireless Access Point configuration in matter of seconds.

Besides its powerful wireless management capabilities, the EWS7928P also excels as an advanced full featured L2 PoE switch providing 24 Gigabit ports that supports 802.3af/at-compliant PoE, with a total PoE power budget of up to 185w and complete PoE management functions, powerful enough for deploying PDs such as network cameras, wireless access points and VoIP phones. 4 Dual-Speed SFP Slots are also present for additional connectivity. Whether the end nodes are a wired server or a wireless AP, the entire network can be managed and monitored via this powerful device.

Optimized Integration with No Bottleneck

EnGenius EWS7928P integrates seamlessly with existing routers, switches, firewalls, authentication servers and other network devices, and can be placed within any network, configured to act as a both a Wireless Controller as well as a Layer 2 PoE Gigabit switch, providing robust and centralized management of the whole network through one powerful system!



Streamlined Configuration to Serve Multiple Constituencies

EWS7928P 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 Access Points individually.

 General Settings 					
Name:	Sales 2				
Country:	Taiwan		•		
	Sales Team 2F				
Description:					
		_le			
	Managed APs			Cluster Member	
	mina (00:11:22:01:93:48) MIS (00:55:66:77:99:88)	<u>^</u>		AP1 (0C:68:62:3F:82:22) AP2 (AD:6F:D5:D7:09:13)	1
	SQA (02:11:22:42:41:40)		Add >>	AP3 (39:0A:DA:20:EB:86)	
Member Setting:	AP4 (2F:3C:2C:AC:61:6F) AP6 (23:2D:9D:E7:18:68)		<< Del		
	AP7 (73:A1:02:49.9F:27)		<< Del		
		-			
	Show MAC Show MAC				
Radio Settinos					
-					
WLAN Settings - 2.4GHz					
WLAN Settings - 5GHz					
Advanced Settings					

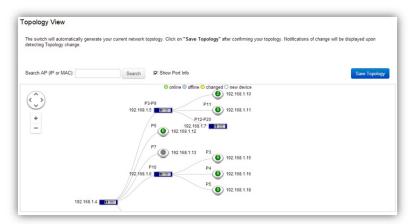
			d to the network. This sortable list o g the device name, users will be red			show/hide columns	AS	P(s) under Approval
0	٢	٩			11 10 MANAGED ACTIV	1 OFFLINE	0	Allow
-	*	Status 0	MAC Address	Device Name	IP Address	Cluster	1	00 11 22 01 93 44
-	0	Connecting	00 11 22 01 93 48	mina	192, 168, 1, 105		C	AP8 40:18:10:09:02:2F
	•	Connecting	00:55:66:77:99:88	MIS	192.168.1.223		E	AP9
Г	•	Connecting	02:11:22:42:41:40	SQA	192.168.1.222			C0 17 5E 2D C5 A8
	•	Online	0C 6B 62 3F 82 22	AP1	192.168.1.10	clusterA.	•	AP10 0C:68:62:3F:82:DD
Г	•	Online	23.2D.9D.E7:18.68	AP6	192.168.1.16		E	AP11
-	0	Offine	2F.3C.2C.AC.61.6F	AP4	192 168 1 13			CC:1C:44:69:3C:45
	•	Online	39.0A DA 20 EB B6	AP3	192.168.1.12	clusterA		
	•	Connecting	73:A1:02:49:9F:27	AP7	192.168.1.18			
•	•	Online	AB EF 88 95 17 D2	AP12	192.168.1.15			
	•	Online	AD 6F D5 D7 09 13	AP2	192.168.1.11	clusterA		

Cluster Setting: Assign APs to clusters for group configuration

Managed AP(s) List: Easily install, configure, manage and monitor all APs in network

Intuitive User Interface for Easy Management

EnGenius EWS7928P's user friendly GUI provides instant access to a variety of client and network information including Managed AP List, Auto Discovered AP List, Cluster Grouping List, and Client List with complete MAC/IP Address, Incoming/Outgoing Traffic, Wireless Output Power and other relevant information. Statistics of AP and client traffics are automatically generated into easy-to-understand graphs, providing a visual representation of the network traffic. Not to forget the Topology View feature that allows administrators to quickly see the whole wired/wireless network topology at real-time for easier planning, troubleshooting and monitoring, as well as Floor Plan View and Map View which allows for quickly locating deployed APs, a helpful feature for large scale AP deployment and multi-site management. There's also an Intelligent Diagnostics feature for administrators to check the status of Wireless APs and provide easy troubleshooting for offline units and even capable of rebooting APs remotely. In addition, EWS7928P's Bulk Upgrade feature can apply new firmware to all supported EnGenius Wireless Access Points on the network, thus greatly simplifying the firmware upgrade process.

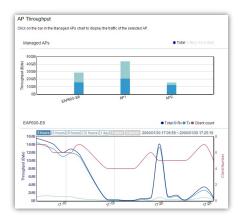


Topology View: Real-time Topology View for simplified planning, monitoring and troubleshooting

Current f	firmware i	image	infomat	ion:					
	Model	Firm	ware Ve	ersion	File Na	me	Image Size(E	Byte) Upload	Time
	c600	V	2.0.0-C0	.2 0	600-v2.0.0-	C0.2.img	5681156	2013-Sep-0-	4 11:29:33
Upload \	Vireless /	AP firm	ware in	nage file	o controller	Unload	New File		
Devi	ice List								
_	ld to upgra								
_	ld to upgra	ade	¢	Mode	4 \$	Name	\$	MAC Addres	s
Ad	ld to upgra Sta		¢	Mode c60		Name AP2	¢	MAC Addres AD:6F:D5:D7:0	-
Ad	ld to upgra Sta On	itus	\$)		\$		9:13
Ad	ld to upgra Sta On On	itus	¢	c60)	AP2	¢	AD:6F:D5:D7:0	9:13 B:B6
Ad	ld to upgra Sta On On On	itus iline iline	¢	c60 c60)))	AP2 AP3	\$	AD:6F:D5:D7:0 39:0A:DA:20:E	9:13 B:B6 7:D2

Bulk Upgrading: Hassle-free AP firmware upgrading

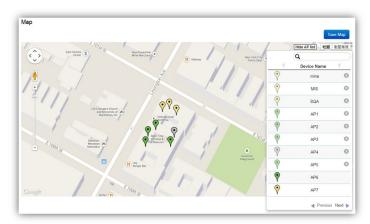




Statistics: Automatically generates easy-to-read network traffic charts



Floor Plan View: Upload custom floor plan images of your location



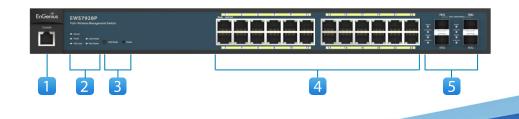
Map View: Simplifies multi-site management of large scale deployments.

Advanced WLAN Features

The Wireless Management Switch comes fully packed with advanced wireless networking features including Band Steering, Fast Handover, Fast Roaming, Mesh Network, Guest Network and SSL Certificate Management. *Wireless Band Steering* automatically directs 5GHz-compatible clients to a 5GHz band to ease traffic congestion on the 2.4GHz band, improving capacity, throughput, and the experience for users in crowded bandwidth-intensive wireless networks. *Fast Roaming* and *Fast Handover* allow mobile users to roam between different APs and seamlessly maintain an uninterrupted connection for latency-sensitive voice and video applications. *Mesh Network*¹ further extends WLAN coverage without the need to have APs physically connected to the switch, greatly reducing the cost and time requirements of deploying a complicated network. *SSL Certificate Management* enables users to easily setup a self-signed SSL Certificate for securing data transfer between the Wireless Management Switch and Wireless APs, providing a robust security fence for your wireless network.

Physical Interface

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





Technical Specifications

General Features

Switching Capacity: 56Gbps Forwarding Mode: Store and Forward SDRAM: 256MB Flash Memory: 32MB

Port Functions

- 24 10/100/1000Mbps Ports
- 4 100/1000Mbps SFP Slots
- 1 RJ45 Console Port

PoE Capability

PoE Standard: supports IEEE 802.3af/at PoE Capable Ports: Port 1~24 output up to 30W Total PoE Power Budget: 185Watts

LED Indicators

Device: Power LED, Fault LED, PoE Max LED, LAN Mode LED, PoE Mode LED Copper Ports: LAN/PoE Mode, Link/Act SFP Ports: Speed, Link/Act

Physical & Environment

Dimension (W x D x H): 440 x 260 x 44mm (17.3 x 10.2 x 1.7 inches) Weight: 3.59kg (7.92lbs) Operating Temperature: $0 \sim 50^{\circ}$ C (32 ~ 132°F) Storage Temperature: -40 ~ 70°C (-40 ~ 158°F) Humidity: 5 ~ 95% non-condensing

Wireless Management Features

Wireless Network Management

- Manage up to 50 Access Points
- AP Auto Discovery and Provisioning
- AP Auto IP-Assignment
- AP Cluster Management
- Wireless Configuration
 - Remote AP Rebooting
 - AP Device Name Editing
 - AP Radio Settings
 - Band Steering
 - Traffic Shaping
 - AP Client Limiting
 - Fast Handover
 - Fast Roaming
 - Guest Network
 - Mesh Network¹
 - Wireless Security (WEP, WPA / WPA2 Enterprise, WPA-PSK / WPA2-PSK)
 - VLANs for Access Point Multiple SSID

Wireless Network Monitoring

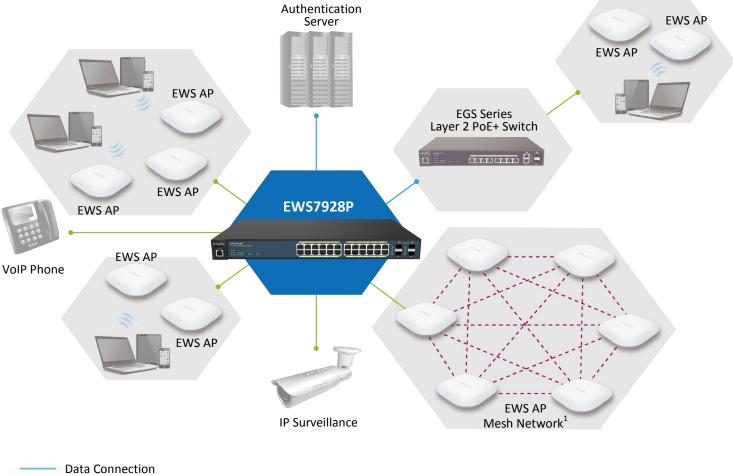
- AP Status Monitoring
- Wireless Client Monitoring
- Wireless Traffic and Usage Statistics
- Visual Topology View
- Floor Plan View
- Map View
- Wireless Network Security
 - Secure Control Messaging
 - SSL Certificate
- Management
 - Local MAC Address Database
 - Remote MAC Address Database (RADIUS)
 - Unified Configuration Import/Export
 - Intelligent Diagnostic
 - Bulk Firmware Upgrade

L2 Features

IEEE802.3ad Link Aggregation Port Mirroring STP / RSTP / MSTP IGMP Snooping v1/v2/v3 **IGMP** Fast Leave MLD Snooping **VLAN** Group Voice VLAN CoS Queues IEEE802.1X Port-based Access Control IEEE802.1X Guest VLAN Port Security Storm Control Port Isolation **Attack Prevention** IPv4/ IPv6 Access Control List (ACL) **Bandwidth Control PoE Management** SSH Server **Telnet Server TFTP** Client **BootP/DHCP Client** SNMP v1/v2c/v3 support TFTP upgrade Command Line Interface (CLI) **RADIUS Authentication** SNTP RMONv1 SYSLOG **Cable Diagnostic MIB Support**



Application Diagram



Power + Data Connection

----- Mesh Network¹



Ordering Information

Product No.	Product Description					
Wireless Man	agement Switch					
EWS5912FP	8-Port Gigabit PoE+ L2 Wireless Management Switch with 2 GbE Ports and 2 Dual-Speed SFP; 130w					
EWS7928P	24-Port Gigabit PoE+ L2 Wireless Management Switch with 4 Dual-Speed SFP; 185w					
EWS7952FP	48-Port Gigabit PoE+ L2 Wireless Management Switch with 4 Dual-Speed SFP; 740w					
Wireless Man	aged Access Point					
EWS310AP	Dual Band Wireless N600 Managed Indoor Access Point					
EWS320AP	Dual Band Wireless N900 Managed Indoor Access Point					
EWS360AP	Dual Band Wireless AC1750 Managed Indoor Access Point					
EWS610AP	Dual Band Wireless N600 Managed Outdoor Access Point					
EWS620AP	Dual Band Wireless N900 Managed Outdoor Access Point					
EWS660AP	Dual Band Wireless AC1750 Managed Outdoor Access Point					
PoE+ Layer 2 Managed Switch						
EGS5212FP	8-Port Gigabit PoE+ L2 Managed Switch with 2 GbE Ports and 2 Gigabit SFP; 130w					
EGS7228P	24-Port Gigabit PoE+ L2 Managed Switch with 4 Dual-Speed SFP; 185w					
EGS7228FP	24-Port Gigabit PoE+ L2 Managed Switch with 4 Dual-Speed SFP; 370w					
EGS7252FP	48-Port Gigabit PoE+ L2 Managed Switch with 4 Dual-Speed SFP; 740w					

¹ Mesh Network is supported through future firmware upgrade.

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range can vary depending on many factors including environmental conditions, distance between devices, radio interference in the operating environment, and mix of devices in the network. Features and specifications subject to change without notice. Trademarks and registered trademarks are the property of their respective owners Copyright © 2013 EnGenius. All rights reserved.