



ALL-SG8910PM

8-port 10/100/1000M PoE + 2 Gigabit SFP/RJ45 Copper Combo Ports

- *IEEE 802.3at/af PoE, up to 30W per port*
- *Layer 2+ Full Managed Software Features with MSTP, LACP, LLDP, sFlow, 802.1X, RADIUS, TACAS+, and ACL*
- *DHCP Server/Relay/Snooping*
- *Voice VLAN*
- *PD Alive Check*
- *Fanless*

Part no. 137466



8-Port 10/100/1000M PoE + 2 Gigabit SFP/RJ45 Combo Ports Layer 2+ Full Managed Switch (Fanless)

Introduction

ALL-SG8910PM is 8-port 10/100/1000M PoE + 2 Gigabit SFP/RJ45 Copper Combo Ports L2+ Full Managed Switch that is designed for small or medium network environment to strengthen its network connection. The 8 PoE ports support IEEE 802.3at/af PoE technology, up to 30W per port and maximum 100m transmission distance. The switch equipped with AC to DC power module to support 240W power budget for PoE power. The added 2 SFP/RJ45 combo ports support 100M and Gigabit Fiber transceiver for long distance transmission. The switch also supports Layer 2+ full management software features. These features are powerful to provide PoE Control, Network Control, Management, Monitor and Security features' requests. It is a superb choice to boost your network with better performance, efficiency and high PoE power consumption.

IEEE 802.3at/af Power over Ethernet (PoE) ports

This product can convert standard 100~240V/AC power into low-voltage DC that runs over existing LAN cable to power up IEEE 802.3at/af compliant network accessories. It also features PoE awareness to verify whether the network device receive power is IEEE 802.3at/af compliant, or only the data will be sent through LAN cable. By adding the switch to the existing networking, installing networking products such as Access Points and IP cameras can be easily managed and set up.

2 Gigabit RJ45 Copper/SFP Combo Ports

ALL-SG8910PM supports 2 Gigabit Copper/SFP Combo Ports to uplink to servers, storage, or other switching devices for long loop reach applications.

Full Layer 2+ Management Features

The switch includes full Layer 2+ Management features. The software set includes up to 4K 802.1Q VLAN and advanced Protocol VLAN, Private VLAN, MVR...advanced VLAN features. There are 8 physical queues Quality of Service, IPv4/v6 Multicast filtering, Rapid Spanning Tree protocol to avoid network loop, Multiple Spanning Tree Protocol to integrate VLAN and Spanning Tree, LACP, LLDP; sFlow, port mirroring, cable diagnostic and advanced Network Security features. It also provides Console CLI for out of band management and SNMP, Web GUI for in band Management.

Advanced Security

The switch supports advanced security features. For switch management, there are secured HTTPS and SSH, the login password, configuration packets are secured. The port binding allows to bind specific MAC address to the port, only the MAC has the privilege to access the network. The 802.1X port based Access Control, every user should be authorized first when they want to access the network. AAA is the short of the Authentication, Authorization and Accounting with RADIUS, TACAS+ server. Layer 2+ Access Control List allows user to define the access privilege based on IP, MAC, Port number...etc.



PD Alive Check

When this function is enabled, ALL-SG8910PM will detect a network PoE powered device (for example, an IP CAM) with a set of IP address periodically. If the switch doesn't get any replies from the network PoE powered device, ALL-SG8910PM will do a power cycle (PoE power OFF, and PoE power ON) to the port that connects the network PoE powered device, allowing that device to reboot. You can set the frequency of detecting, number of times of detecting, and the time period to perform power cycle when there's no reply via the switch's PoE configuration web page.

Product Specification

Interface		
10 Base-T / 100 Base-TX / 1000 Base-T RJ45 Ports	8	
100/1000Base-X SFP and 1000 RJ45 Combo Port	2	
Console Port for CLI Management	1	
System Performance		
Packet Buffer	4Mbits	
MAC Address Table Size	8K	
Switching Capacity	20Gbps	
Forwarding Rate	14.88Mpps	
PoE Features		
IEEE 802.3 af/at	IEEE 802.3 af/at	
Number of PSE Ports	8	
Max. Power Budget	240W	
Max. System Power Consumption	10W	
External/Internal Power	Internal Power	
Power Feeding Detecting Capability on PD	•	
PD Alive Check	•	
PD Classification	•	
Power Management (per-port)	Enable/Disable PoE Per Port	•
	Priority Setting Per Port	•
	Power Level Setting Per Port	•
	Overloading Protection	•



L2 Features

Auto-negotiation		•
Auto MDI/MDIX		•
Flow Control (duplex)	802.3x (Full)	•
	Back-Pressure (Half)	•
Spanning Tree	IEEE 802.1D (STP)	•
	IEEE 802.1w (RSTP)	•
	IEEE 802.1s (MSTP)	•
VLAN	VLAN Group	4K
	Tagged Based	•
	Port-based	•
	Voice VLAN	Voice VLAN with OUI
Link Aggregation	IEEE 802.3ad with LACP	•
	Static Trunk	•
	Max. LACP Link Aggregation Group	5
	Max. Port per Link Aggregation Group	8
IGMP Snooping	IGMP Snooping v1/v2/v3	Supports 1024 IGMP groups
	IGMP Static Multicast Addresses	Supports 1024 static multicast addresses
	IPv6 MLD Snooping	Supports 1024 MLD groups
	MLD Static Multicast Addresses	Supports 1024 static multicast addresses
	Querier, Immediate Leave	•
Storm Control (Broadcast/Multi-cast/Un-known Unicast)		•
Jumbo Frame Support		9.6KB

QoS Features

Number of priority queue		8 queues/port
Rate Limiting	Ingress	Yes, 1KBps/1pps
	Egress	Yes, 1KBps/1pps
DiffServ (RFC2474 Remarking)		•
Scheduling (WRR, Strict, Hybrid)		•
CoS	IEEE 802.1p	•
	IP ToS precedence, IP DSCP	•



Security	
Management System User Name/Password Protection	•
User Privilege	Set user privilege up to 15 Level
Port Security (MAC-based)	•
IEEE 802.1x Port-based Access Control	•
ACL (L2/L3/L4)	•
IP Source Guard	•
RADIUS (Authentication, Authorization, Accounting)	•
TACACS+	•
HTTP & SSL (Secure Web)	•
SSH v2.0 (Secured Telnet Session)	•
MAC/IP Filter	•
Management	
Command Line Interface (CLI)	•
Web Based Management	•
Telnet	•
Access Management Filtering	SNMP/WEB/SSH/TELNET
Firmware Upgrade via HTTP	•
Dual Firmware Images	•
Configuration Download/Upload	•
SNMP (v1/v2c/v3)	•
RMON (1,2,3,&9 groups)	•
DHCP (Client/Relay/Option82/Snooping)	•
System Event/Error Log	•
NTP/LLDP	•
Cable Diagnostics	•
IPv6 Configuration	•
Port Mirroring	One to One or Many to One



Mechanical	
Power Input	100~240VAC
Dimension (H*W*D)	44*330*210 mm
LED	Power, PoE, Link/Act, SFP
Operating Temperature	0~45°C
Storage Temperature	-20~80°C
Operating Humidity	5~90% (non-condensing)
Weight	2.2 KG
Certification	VCCI, CE, FCC Class A
Standard	
IEEE 802.3 – 10BaseT	•
IEEE 802.3u - 100BaseTX	•
IEEE 802.3ab - 1000BaseT	•
IEEE 802.3z 1000BaseSX/LX	•
IEEE 802.3af Power over Ethernet (PoE)	•
IEEE 802.3at Power over Ethernet (PoE+)	•
IEEE 802.3az - Energy Efficient Ethernet (EEE)	•
IEEE 802.3x - Flow Control	•
IEEE 802.1Q - VLAN	•
IEEE802.1v - Protocol VLAN	•
IEEE 802.1p - Class of Service	•
IEEE 802.1D - Spanning Tree	•
IEEE 802.1w - Rapid Spanning Tree	•
IEEE 802.1s - Multiple Spanning Tree	•
IEEE 802.3ad - Link Aggregation Control Protocol (LACP)	•
IEEE 802.1AB - LLDP (Link Layer Discovery Protocol)	•
IEEE 802.1X - Access Control	•



NEW FEATURES

1. 3rd Party JSON API

ALLNET JSON API (json output, switching with json response)



id

Command (URL) <http://192.168.0.100/xml/jsonswitch.php?id=2>

Explanation here is determined with which actuator to be switched.
Is the parameter „set“ not set the device returns only the status (0/1).

```
Response {
  "result": {
    "id": "2",
    "status": 0
  }
}
```

set

Command (URL) <http://192.168.0.100/xml/jsonswitch.php?id=2&set=1>

Explanation *(optional)*
with this parameter, the on / off switching command is set.
It returns always the status before switching and the command themselves.

```
Response {
  "result": {
    "id": "2",
    "status": 0,
    "set": "1"
  }
}
```

callback

Command (URL) <http://192.168.0.100/xml?id=2&set=0&callback=demo>

Explanation *(optional)*
can be set to get back the data as a JSONP object.

```
Response demo({
  "result": {
    "id": "2",
    "status": 1,
    "set": "0"
  }
})
```

ALLNET GmbH

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2. JSON INTEGRATION INTO THE ALLNET BUILDING AUTOMATION

PoE Ports

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[Software: 3.35.1076]

MORE DETAILS ABOUT BUILDING AUTOMATION
SEE LINK: <http://www.allnet.de/en/allnet-brand/produkte/building-automation/>