

## Layer 2 26-Port Gigabit Uplink Managed PoE Switch





#### Overview

The SG-POE31024PFM series is a Gigabit uplink managed PoE fiber switch independently developed by Shogun. It has 24\*10/100M RJ45 ports and 2 \*10/100/1000M RJ45 ports and 2 \*100/1000M SFP fiber slot ports (combo port), Port 1-24 can support IEEE 802.3af/at standard PoE power supply, and single port PoE power reaches 30W. The maximum PoE output power is 400W(at-600W), and each port can realize line-speed forwarding.

The SG-POE31024PFM series adopts a new generation of high-performance hardware and software platforms to provide flexible and cost-effective 100Mbps access and uplink ports. It supports complete security protection mechanisms, complete ACL/QoS policies, and flexible VLAN functions, and is easy to manage and maintain. As a PoE power supply device, it can automatically detect and identify the power-receiving equipment that meets the standard and meet the network environment that needs high-density PoE power supply. It is suitable for hotels, campuses, parks, attractions, supermarkets, Factory quarters and small and medium-sized enterprises form a cost-effective network.

#### **Features**

### 100Mbps access, Gigabit (TP/SFP) combo port uplink

- All series supports "10/100M Ethernet port and Gigabit TP/SFP port " combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.

## Intelligent PoE power supply function

- 16\*10/100Base-TX RJ45 ports, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios
- IEEE 802.3af/at PoE standard, without damaging non-PoE devices.
- Priority system for PoE port, it will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.

### Security

- 802.1X authentication.
- Port autentication ,Storm control.
- IP-MAC address authentication.

## Strong business processing capability

- IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and QinQ configuration.
- QoS, Priority mode based on 802.1P, Port & DSCP, queue
- scheduling algorithm including EQU, SP, WRR & SP+WRR.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- IGMP V1/V2 and IGMP Snooping.
- ERPS/STP/RSTP/MSTP.
- Static and dynamic aggregation.

### Strong business processing capability

- Low power consumption, no fan mute design, galvanized steel metal casing.
- Self-developed power supply, high redundancy design, providing a long term and stable PoE power output.
- CCC,CE, FCC, RoHS.
- The user-friendly panel, it can show the device status through the LED indicator of PWR, Link, POE.

### Easy operation and maintenance management

- Web management, CLI command line (Console, Telnet), SNMP (V1/V2/V3).
- HTTPS, SSLV3, and SSHV1/V2.
- RMON, system log, LLDP, and port traffic statistics.
- CPU monitoring, memory monitoring, Ping test, and cable diagnose.



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Model	SG-POE31024PFM SG-POE31024PFM-at		
Interface Characteristics			
Fixed Port	24*10/100Base-TX PoE ports (Data/Power)		
	2*10/100/1000Base-T uplink RJ45 ports (Data)		
	2*1000M uplink SFP fiber slot ports (Data)		
	1*Console port (command line )		
Ethernet Port	Port 1-24 support 10/100Base-TX, port 25-26 support		
	10/100/1000Base-T, auto-sensing, full/half duplex MDI/MDI-X		
	self-adaption.		
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meter)		
	100BASE-TX: Cat5 or later UTP(≤100 meter)		
	1000BASE-T: Cat5e or later UTP(≤100 meter)		
	Gigabit SFP optical fiber interface, default matching optical modules		
SFP Slot Port	(optional order single-mode / multi-mode, single fiber / dual fiber optical		
	module. LC)		
Optical Cable			
Optical Cable	0 ~ 120KM.		
Chip Parameter			
	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T,		
	IEEE802.3u 100Base-TX,		
Network Protocol	IEEE802.3ab 1000Base-T		
	IEEE802.3z 1000Base-X		
	IEEE802.3x		
Forwarding Mode	Store and Forward(Full Wire Speed)		
Switching Capacity	64Gbps (Non-blocking)		
Forwarding	6.55Mpps		
Rate@64byte			
MAC	16K		
Buffer Memory	4M		
Jumbo Frame	10K		
LED Indicator	Power:PWR(green), Data :Link,Link/Act (yellow), PoE: PoE (green), Speed: SPD (green)		



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PoE & Power			
PoE Port	Port 1 to 24 IEEE802.3af/at @ POE		
PoE Management	PoE working status  Delay start of power supply  PoE output priority configuration  Scheduling of PoE operation and time		
Power Supply Pin	Defaul :1/2 (+), 3/6 (-),optional:4/5 (+), 7/8 (-)		
Max Power Per Port	30W; IEEE802.3af/at		
Total PWR / Input Voltage	400W/ (AC100-240V)	600W/ (AC100-240V)	
Power Consumption	Standby<18W, Full load<380W	Standby<25W, Full load<600W	
Power Supply	Built in power supply, AC100~240V 50-60Hz 5.0A	Built in power supply, AC100~240V 50-60Hz 6.6A	
Physical Parameter			
Operation TEMP / Humidity	-20~+55°C;5%~90% RH Non condensing		
Storage TEMP / Humidity	-40~+75°C;5%~95% RH Non condensing		
Dimension (L*W*H)	440*290*44.5mm		
Net /Gross Weight	<4.5kg/<5kg		
Installation	Desktop,wall mounted,19 inch 1U cabinet installation		
Certification & Warranty			
Port lightning protection	Port lightning protection : 4KV 8/20us,Protection level: IP30		
Certification	CCC;CE mark, commercial;CE/LVD EN60950; FCC Part 15 Class B;RoHS		
Warranty	3 years, lifetime maintenance.		
Network Management Features			
Interface	IEEE802.3X (Full-duplex)  Broadcast storm control based on port speed  The speed limit of the message flow in the access port.  The minimum particle size is 64Kbps.		
VLAN	QinQ configuration  VLAN based on protocol		



## Layer 2 26-Port Gigabit Uplink Managed PoE Switch

	4K VLAN based on port, IEEE802.1q		
Port Aggregation	LACP, Static aggregation		
	Max 13 aggregation groups and 8 ports per group.		
Spanning Tree	STP (IEEE802.1d),RSTP (IEEE802.1w), MSTP (IEEE802.1s)		
Multicast	MLD Snooping v1/v2, Multicast VLAN		
	IGMP Snoopingv1/v2/v3, Max 64 multicast groups, Fast log out		
Image	Bi-directional traffic mirroring supporting the basic port		
QoS	8*Output queues of each port		
	802.1p/DSCP priority mapping		
Q03	Diff-Serv QoS,Priority Mark/Remark		
	Queue Scheduling Algorithm (SP, WRR, SP+WRR)		
ACL	Port-based Issuing ACL		
	L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL		
	based on MAC, Destination MAC address, IP Source, Destination IP, IP		
	Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.		
Security	Port isolation, Storm control.		
	IP-MAC-VLAN-Port binding		
DHCP	DHCP Client,DHCP Snooping,DHCP Relay		
Management	NTP		
	SNMP V1/V2C/V3		
	One-key recovery		
	System work log		
	Web Management (HTTPS)		

