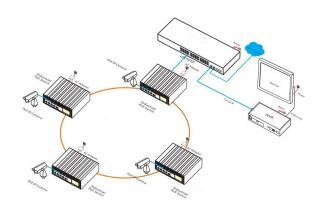


### 8-port Full Gigabit Managed Industrial PoE Switch





#### Overview

The SG-IPS33084PFM is a full Gigabit L2+ managed industrial PoE fiber switch It has 4\*10/100/1000M adaptive RJ45 ports and 4\*100/1000M SFP ports. Port 1-4 can support IEEE802.3af/at PoE standard. Single-port POE power up to 30W. As a PoE power supply device, it can automatically detect and recognize power-compliant devices that meet the standard and supply power through the network cable. It can supply power to POE terminal equipment such as wireless AP, IP camera, VoIP, and industrial sensors through the network cable, and meet the network environment that needs a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, power industry, mining, petroleum, and industrial scenes such as shipping, metallurgy, and green energy construction form a cost-effective, stable, and reliable communication network.

The SG-IPS33084PFM has L2+ full network management function, support IPv4/ IPv6 management, static route forwarding, security protection mechanism, ACL/QoS policy and VLAN, and is easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP(<50ms) and (ITU-T G.8032) ERPS(<20ms) to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as PoE power management, port traffic control, VLAN division, and SNMP through the Web network management mode.

#### Features

#### Gigabit access, SFP fiber port uplink

- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on Backpressure.
- Support Gigabit Ethernet port and Gigabit SFP port combination, to flexibly build networking to meet the needs of various scenarios.

### Intelligent PoE power supply

- IEEE802.3af/at PoE standard, without damaging non-PoE devices.
- PoE network management, realize PoE port power allocation, priority setting, port.
- 4\*10/100/1000Base-T RJ45 ports, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.
- 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.

### Security

- Support port isolation.
- Support port broadcast storm suppression.
- Support IP+MAC+port+VLAN quadruple flexible combination binding function.
- Support 802.1X authentication to provide authentication functions for LAN computers, and control the authorization status of controlled ports according to the authentication results.



Model	SG-IPS33084PFM	
Interface Characteristics		
Fixed Port	1*Console port(115200,N,8,1)	
	4*10/100/1000Base-T PoE ports (Data/Power)	
	4*100/1000Base-X uplink SFP slot ports (Data)	
	2 set of V+, V- redundant DC power interface (5 Pin Phoenix terminal)	
Ethernet Port	Port 1-4 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 no include optical modules	
SFP Slot Port	(optional order single-mode / multi-mode, single fiber / dual fiber optical	
	module. LC)	
Optical Cable/	Multi-mode: 850nm /0-550M, Single-mode: 1310nm /0-40KM, 1550nm/	
Distance	0-120KM.	
Chip Parameter		
Network	L2+	
Management Type		
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX	
	IEEE802.3ab 1000Base-TX, IEEE802.3z 1000Base-X, IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	192Gbps	
Forwarding	11.9Mpps	
Rate@64byte		
CPU	416MHz	
DRAM	1G	
FLASH	128M	
MAC	8K	
Buffer Memory	4M	
Jumbo Frame	9.6K	



LED Indicator	Power/ System: SYS (Green), Network: Link (Yellow), Fiber port: L/A		
	(Green), PoE: PoE (Green)		
Reset Switch	Yes (Press and release for 10 seconds, the PoE switch will restore to		
	factory settings)		
PoE & Power			
PoE Port	Port 1 to 4 @ IEEE802.3af/at		
PoE Management	Total power limit of PoE power supply		
	PoE output power allocation, on/off & af/at		
	PoE working status, Delay start of power supply		
	PoE output priority configuration, Scheduling of PoE operation and time		
Power Supply Pin	1/2 (+) 3/6 (-)		
Max Power Per Port	30W, IEEE802.3af/at		
Power Consumption	Standby<7W, Full load: af<60W, at<120W		
Working Voltage	DC48-58V, 5 Pin industrial Phoenix terminal, support anti-reverse		
	protection.		
Power Supply	No, optional 48V/60W or 48V/120W industrial power supply		
Physical Parameter			
Operation TEMP /	40 +00°C 50′ 000′ DILNes estdession		
Humidity	-40~+80°C, 5%~90% RH Non condensing		
Storage TEMP /	40-+95°C 59/-059/ DH Non condensing		
Humidity	-40~+85°C, 5%~95% RH Non condensing		
Dimension (L*W*H)	145*134.5*47.5mm		
Net /Gross Weight	<0.7kg / <0.9kg		
Installation	Desktop, 35mm DIN rail		



Certification & Warra	nty	
Lightning Protection	Lightning protection: 6KV 8/20us; Protection level: IP40	
	IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge	
	IEC61000-4-3(RS):10V/m(80~1000MHz)	
	IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV	
	IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV	
	IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz)	
	IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to	
	3s	
	IEC61000-4-9(pulsed magnet field):1000A/m	
	IEC61000-4-10(damped oscillation):30A/m 1MHz	
	IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV	
	IEC61000-4-16(common-mode transmission):30V; 300V,1s	
	FCC Part 15/CISPR22(EN55022):Class A	
	IEC61000-6-2(Common Industrial Standard)	
Mechanical	IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock)	
Properties	IEC60068-2-32 (free fall)	
O antifaction	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B,	
Certification	RoHS	
Warranty	5 years , lifelong maintenance.	
Network Management Features		
	The minimum particle size is 64Kbps.	
	Port green Ethernet Energy-saving setting	
Interface	Broadcast storm control based on port speed	
	The speed limit of the message flow in the access port.	
	IEEE802.3X (Full-duplex), Port temperature protection setting	
Layer 3 Features	Static route, Default route @128 pcs, APR @ 1024 pcs	
	L3 soft routing forwarding, L2+ network management, IPV4/IPV6	
	management	
VLAN	Port configuration of Access, Trunk, Hybrid	
	VLAN based on MAC, Voice VLAN, QinQ configuration	
	4K VLAN based on port, IEEE802.1q, VLAN based on the protocol	
Port Aggregation	LACP, Static aggregation	
	Max 4 aggregation groups and 8 ports per group.	



Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Industrial Ring	
Network Protocol	G.8032 (ERPS),Recovery time less than 20ms
Network Protocol	250 Ring at most, Max 250 devices per ring.
Multicast	MLD Snooping v1/v2,Multicast VLAN
	IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Diff-Serv QoS, Priority Mark/Remark
	Queue Scheduling Algorithm (SP, WRR, SP+WRR)
	Flow-based Rate Limiting, Flow-based Packet Filtering
	8*Output queues of each port, 802.1p/DSCP priority mapping
ACL	Port-based Issuing ACL,ACL based on port and VLAN
	L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL
ACL	based on MAC, Destination MAC address, IP Source, Destination IP, IP
	Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
	IEEE802.1X & MAC address authentication
	Broadcast storm control, Backup for host datum
	SSH 2.0, SSL, Port isolation, ARP message speed limit
Security	User hierarchical management and password protection
	IP-MAC-VLAN-Port binding, ARP inspection, Anti-DoS attack
	AAA & RADIUS, MAC learning limit, Mac black holes, IP source
	protection
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	One-key recovery, Cable Diagnose, LLDP
	Web Management (HTTPS), NTP, System work log, Ping Test
	ONV NMS - smart network management system platform(LLDP+SNMP)
	Console/AUX Modem/Telnet/SSH2.0 CLI, CPU instant utilization status
	view
	Download & Management on FTP, TFTP, Xmodem, SFTP,SNMP
	V1/V2C/V3
	Category 5 Ethernet network cable
	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome
System	V42 or higher, Microsoft Internet Explorer10 or later.
	TCP/IP, network adapter, and network operating system (such as
	Microsoft Windows, Linux, or Mac OS X) installed on each computer in a
	network.