

## Datasheet

# 28-Port 10G Uplink Managed PoE Switch

## SUN-POE36028PFM-AT



SUN-POE36028PFM è uno switch PoE gestito con uplink 10G. Dispone di 24 porte RJ45 10/100/1000Base-T e di 4 porte in fibra 1/10G SFP+. Le porte 1-24 supportano l'alimentazione PoE standard IEEE802.3af/at. La potenza PoE della singola porta raggiunge i 30W e la potenza massima di uscita PoE è di 600W.

SUN-POE36028PFM dispone di funzioni di gestione completa della rete L2+, supporta la gestione IPV4/IPV6, l'inoltro statico della linea a velocità piena, un meccanismo completo di protezione della sicurezza, una politica ACL/QoS completa e ricche funzioni VLAN. Supporta più protocolli di ridondanza di rete STP/RSTP/MSTP (<50ms) e (ITU-T G.8032) ERPS per migliorare il backup dei collegamenti e l'affidabilità della rete. In caso di guasto della rete unidirezionale, la comunicazione può essere ripristinata rapidamente per garantire una comunicazione ininterrotta importante per le applicazioni. In base ai requisiti effettivi dell' utilizzo, è possibile configurare più servizi applicativi come la gestione dell'alimentazione PoE, il controllo del traffico delle porte, la divisione VLAN e SNMP attraverso la modalità di gestione della rete Web.

### ■ Gigabit access, 10G uplink

- ◇ All series supports “Gigabit Ethernet port and 10G SFP+ uplink 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

- ◇ 24\*10/100/1000Base-T RJ45 ports can support POE power supply to meet 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 isolation, Storm control.
- ◇ IP-MAC-VLAN-Port binding.

### ■ 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.

■ **Stable and reliable**

- ◇ Low power consumption, No fan , galvanized steel 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,SYS, Link,L/A ,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.

## TECHNICAL SPECIFICATION

Model	SUN-POE36028PFM	SUN-POE36028PFM-at
<b>Interface Characteristics</b>		
Fixed Port	24*10/100/1000Base-T PoE ports (Data/Power) 4*1/10G uplink SFP+ fiber slot ports (Data) 1*Console RS232 port (115200,N,8,1)	
Ethernet Port	Port 1-24 can support 10/100/1000BaseT 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)	
Optical Fiber Port	10G SFP+ optical fiber port, default matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)	

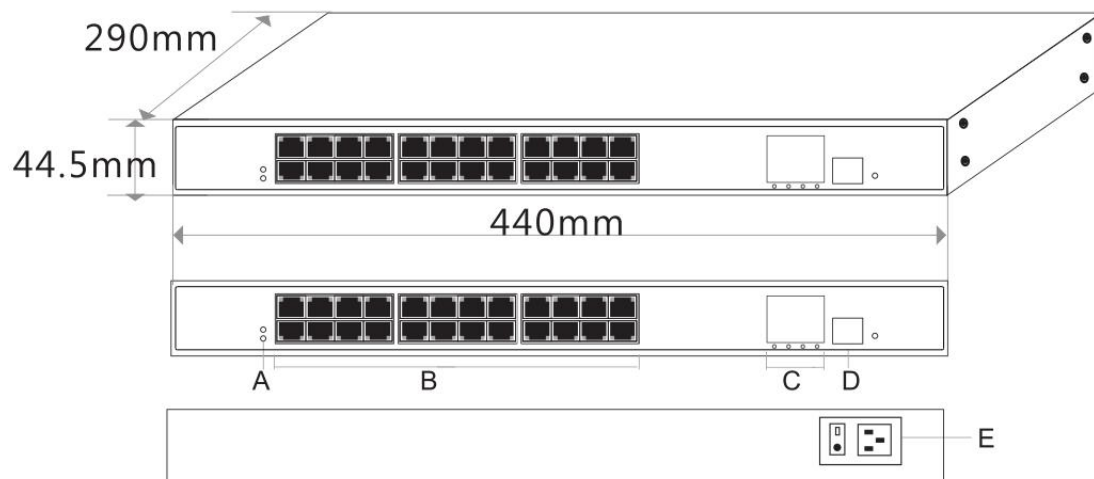
Optical Cable/ Distance	Multi-mode:850nm 0~300M(10G) ,850nm 0~500M (1.25G); Single-mode:1310nm 0~40KM,1550nm 0~120KM.	
<b>Chip Parameter</b>		
Network Management Type	L2+	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X, IEEE802.3ae 10GBase-LR/SR, IEEE802.3x	
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	598Gbps (non-blocking)	
Forwarding Rate@64byte	95.23Mpps	
MAC	32K	
Buffer Memory	32M	
Jumbo Frame	9.6K	
LED Indicator	Power: PWR (yellow), system:SYS (yellow), network: Link (yellow), PoE: PoE (green), Fiber port : L/A (green)	
Reset Switch	Yes, support one key to restore factory settings	
<b>PoE &amp; Power Supply</b>		
PoE Port	Port 1 to 24	
PoE Management	PoE working status Delay start of power supply PoE output priority configuration Scheduling of PoE operation and time Total power limit of PoE power supply PoE output power allocation, off& af &at	
Power Supply Pin	Default: 1/2 (+), 3/6 (-)	
Max Power Per Port	30W, IEEE802.3af/at	
Total PWR / Input Voltage	400W/ (AC100-240V)	600W/ (AC100-240V)

Power Consumption	Standby<25W, Full Load<400W	Standby<30W, Full Load<600W
Power Supply	Built-in power supply, AC100~240V 50-60Hz 5A	Built-in power supply, AC100~240V 50-60Hz 6.6A
<b>Physical Parameter</b>		
Operation TEMP / Humidity	-20~+55°C;5%~90% RH Non condensing	
Storage TEMP / Humidity	-40~+80°C;5%~95% RH Non condensing	
Dimension (L*W*H)	440*290*44.5mm	
Net /Gross Weight	<4.4kg / <5.0kg	<4.6kg / <5.3kg
Installation	Desktop type ,19 inch 1U cabinet installation	
<b>Certification</b>		
Lightning protection / protection level	Lightning protection: 4KV 8/20us; Protection level: IP30	
Certification	CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B; RoHS	
<b>Network Management Features</b>		
Interface	IEEE802.3X (Full-duplex) Port temperature protection setting Port green Ethernet Energy-saving setting Broadcast storm control based on port speed The speed limit of the message flow in the access port. The minimum particle size is 64Kbps.	
Layer 3 Features	L2+ network management ,IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs	
VLAN	4K VLAN based on port, IEEE802.1q VLAN based on the protocol VLAN based on MAC Voice VLAN, QinQ configuration	

	Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 14 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d),RSTP (IEEE802.1w),MSTP (IEEE802.1s)
Industrial Ring	G.8032 (ERPS),Recovery time less than 20ms
Network Protocol	250 Ring at most, Max 1024 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	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping Diff-Serv QoS,Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)
ACL	Port-based Issuing ACL,ACL based on port and VLAN 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	IP-MAC-VLAN-Port binding ARP inspection,Anti-DoS attack AAA & RADIUS,MAC learning limit Mac black holes,IP source protection IEEE802.1X & MAC address authentication Broadcast storm control,Backup for host datum SSH 2.0,SSL,Port isolation,ARP message speed limit User hierarchical management and password protection
DHCP	DHCP Client,DHCP Snooping, DHCP Server,DHCP Relay
Management	One-key recovery Cable Diagnose,LLDP

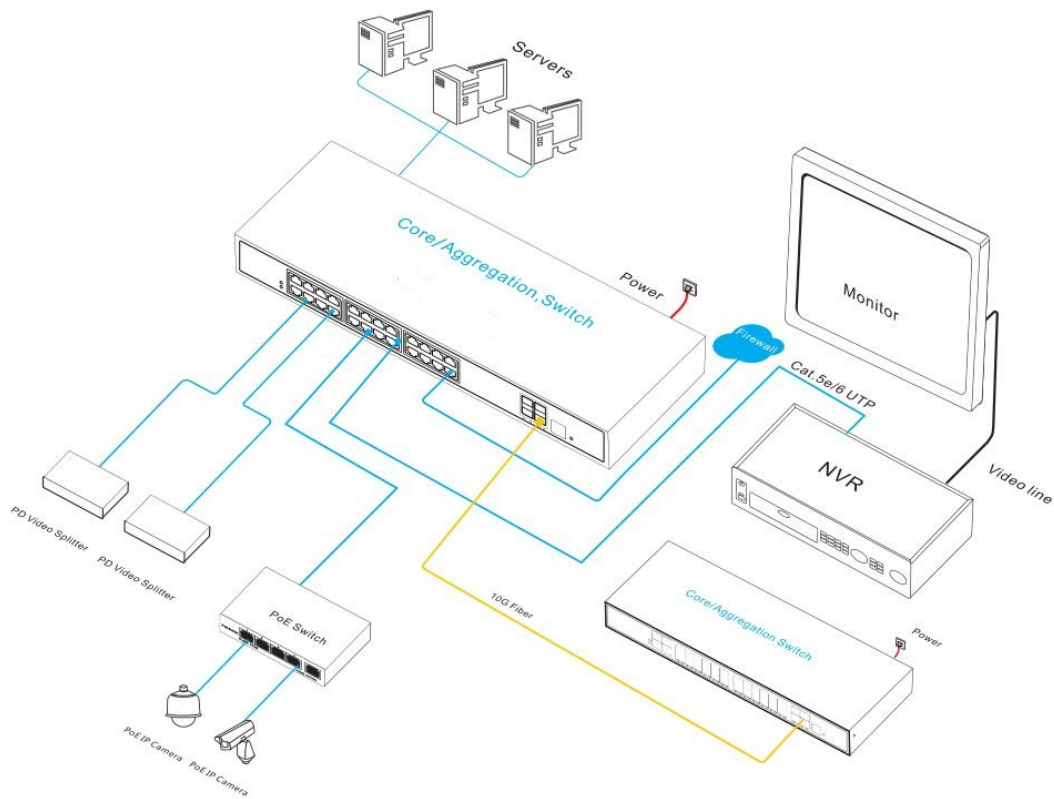
	<p>Web Management (HTTPS)</p> <p>NTP, System work log, Ping Test</p> <p>CPU instant utilization status view</p> <p>Console/AUX Modem/Telnet/SSH2.0 CLI</p> <p>Download &amp; Management on FTP, TFTP, Xmodem, SFTP, SNMP</p> <p>V1/V2C/V3</p> <p>NMS - smart network management system platform(LLDP+SNMP)</p>
System	<p>Category 5 Ethernet network cable</p> <p>Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later;</p> <p>TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network</p>

## DIMENSION



- A. Working Indicator
- B. 24\* 10/100/1000M PoE Ports
- C. 4\*10G SFP+ Ports
- D. Console Port
- E. Power Input Port AC100-240V, 50/60Hz

## APPLICATION



## ORDERING INFORMATION

Model	Description
SUN-POE36028PFM	L2+ managed PoE fiber switch with 24* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports , Port 1-24 can support IEEE802.3af/at PoE standard, Built-in 400W power supply. Support 1U/19 inch rack installation.
SUN-POE36028PFM-at	L2+ managed PoE fiber switch with 24* 10/100/1000M RJ45 ports and 4*1/10G SFP+ fiber slot ports , Port 1-24 can support IEEE802.3af/at PoE standard, Built-in 600W power supply. Support 1U/19 inch rack installation.

**Note:** The SFP optical module is not included by default and needs to be purchased separately.



## OPTICAL MODULE INFORMATION

Product	Model	Description	Unit
1.25G Optical module	SUN-2630	SFP optical module, 1.25G, multi mode dual fiber 850nm, transmission distance: 550m, LC interface, support DDM function, support hot plug and pull.	PC
	SUN-2632	SFP optical module, 1.25G, single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	SUN-2612-T	SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	SUN-2613-R	SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	SUN-2612-T-SC	SFP optical module, 1.25G, single-mode single fiber TX1310nm/RX1550nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
	SUN-2613-R-SC	SFP optical module, 1.25G, single-mode single fiber TX1550nm/RX1310nm, transmission distance: 20km, SC interface, support DDM function, support hot plug and pull.	PC
Power Module	SUN-2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC
10G Optical module	SUN-6630	SFP+ optical module, 10G Multi-mode dual fiber 850nm, transmission distance: 300m, LC interface, support DDM function, support hot plug and pull.	PC
	SUN-7832	SFP+ optical module, 10G Single-mode dual fiber 1310nm, transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC
	SUN-7832-33	SFP+ optical module, 10G Single-mode single fiber TX1330nm/RX1270nm, transmission distance: 20km,	PC

		LC interface, support DDM function, support hot plug and pull.	
	SUN-7832-27	SFP+ optical module, 10G Single-mode single fiber TX1270nm/RX13300nm , transmission distance: 20km, LC interface, support DDM function, support hot plug and pull.	PC

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