Datasheet

10-port Full Gigabit Managed Industrial bt PoE Switch

SUN-IPS33108PFM-bt

SUN-IPS33108PFM-bt è uno switch in fibra PoE industriale gestito Gigabit L2+. Dispone di 8* porte RJ45 adattive 10/100/1000Base-T e 2* porte SFP 100/1000Base-X in fibra. La porta 1-8 supporta lo standard IEEE 802.3 af/at/bt PoE e la potenza PoE a porta singola fino a 90W. Come dispositivo di alimentazione PoE, è in grado di rilevare e identificare automaticamente i dispositivi alimentati conformi agli standard e di alimentarli attraverso i cavi di rete.

SUN-IPS33108PFM-bt supporta più protocolli di ridondanza di rete STP/ RSTP/ MSTP (<50ms). In caso di guasto di una rete unidirezionale, la comunicazione può essere ripristinata rapidamente per garantire una comunicazione ininterrotta per le applicazioni importanti. Il telaio in lega di alluminio, che segue il design e i materiali dei prodotti industriali, migliora la dissipazione del calore. Il livello di protezione è IP40. Ciò garantisce il funzionamento stabile dell'apparecchiatura in ambienti difficili. La gestione dell'alimentazione PoE, il controllo del flusso delle porte, la divisione VLAN, STP, RSTP e altre funzioni possono essere configurate in base alle esigenze dell' utente attraverso i

metodi di gestione della rete Web, CLI e SNMP.

■ **Gigabit access, SFP fiber port uplink**

◇ Support non-blocking wire-speed forwarding.

◇ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.

◇ The combination of RJ45 port and SFP fiber port allows users to flexibly build networks to meet the networking needs of various scenarios.

■ **Intelligent PoE power supply**

◇ PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.

◇ 8*10/100/1000Base-T RJ45 ports can support bt PoE power, meeting the demand for super high power PoE power supply in various scenarios.

◇ The max output power of single-port POE is 90W, and the backwards compatibility IEEE 802.3 af/at PoE standard, automatically identify PoE devices for power supply, and not damage non-PoE devices.

■ **Strong business processing ability**

◇ Support ERPS ring network and STP/RSTP/MSTP to eliminate layer 2 loops and realize link backup.

◇ Support IEEE 802.1Q VLAN, users can flexibly divide VLAN according to needs, support Voice VLAN and QinQ configuration.

◇ Support static and dynamic aggregation to effectively increase link bandwidth, realize load balancing, link backup, and improve link reliability.

◇ Support QoS, port-based, 802.1P-based and DSCP-based three priority modes and four queue scheduling algorithms: Equ, SP, WRR, and SP+WRR.

◇ Support ACL to filter data packets by configuring matching rule processing operations and time permissions, and provide flexible security access control policies.

◇ Support IGMP V1/V2/V3 multicast protocol and IGMP Snooping to meet multi-terminal high-definition video surveillance and video conference access requirements.

■ **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.

■ **Stable and reliable**

◇ CCC, CE, FCC, RoHS.

◇ Low power consumption, metal shell, excellent heat dissipation to ensure stable operation of the switch.

◇ The user-friendly panel can show the device status through the LED indicator of PWR, SYS, Link, L/A, PoE.

■ **Easy O&M management**

◇ Support CPU monitoring, memory monitoring, Ping detection, cable length detection.

◇ Support RMON, system log, and port traffic statistics to facilitate network optimization and transformation.

◇ Support HTTPS, SSLV3, SSHV1/V2 and other encryption methods, making management more secure.

◇ Support LLDP to facilitate the network management system to query and judge the communication status of the link.

◇ Support Web network management, CLI (Console, Telnet), SNMP (V1/V2/V3), Telnet and other diversified management and maintenance methods.

TECHNICAL SPECIFICATION

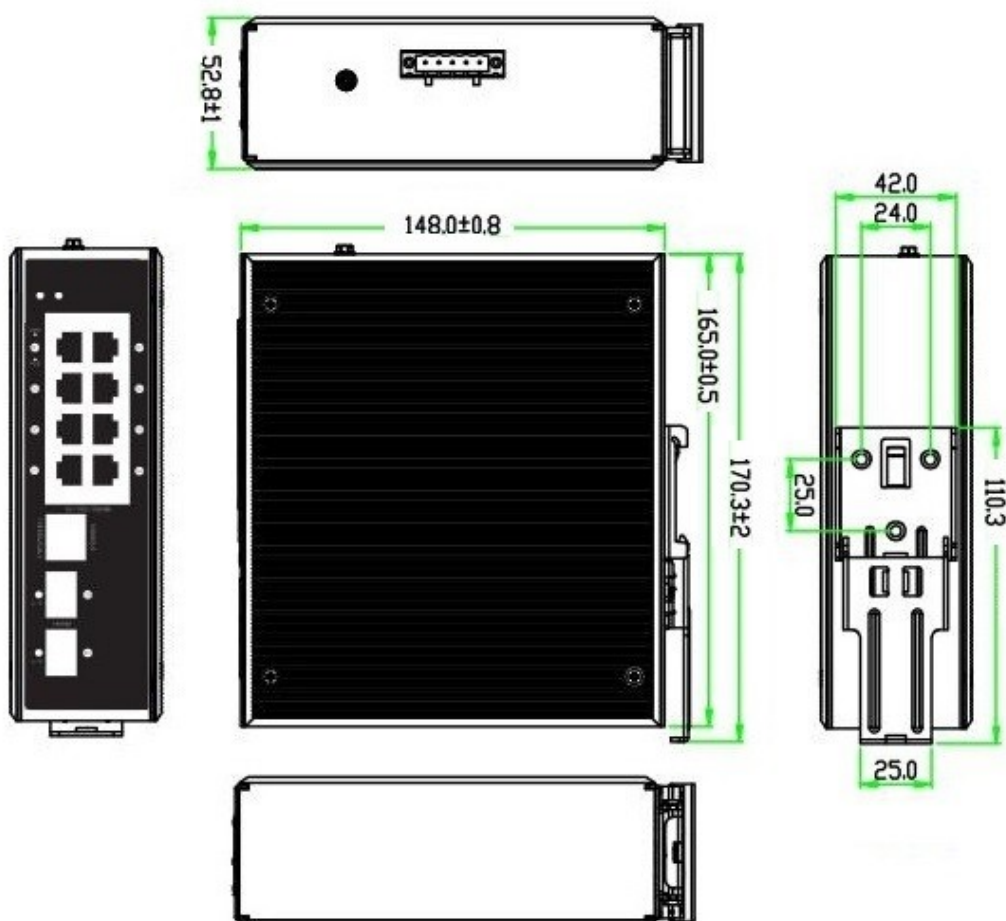| Model	SUN-IPS33108PFM-bt
Interface Characteristics	
Fixed Port	1*RS232 console port (115200,N,8,1) 2*100/1000Base-X uplink SFP ports (Data) 8*10/100/1000Base-T bt PoE ports (Data/Power) 2 set of V+, V- redundant DC power interface (6 Pin Phoenix terminal)
Ethernet Port	Port 1-8 support 10/100/1000Base-T auto-sensing, full/ half duplex MDI/ MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)
SFP Slot Port	Gigabit SFP optical fiber port, default no include optical modules (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-500m Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.
Chip Parameter	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	20Gbps
Forwarding Rate@64byte	14.88Mpps
CPU	416MHz
DRAM	1G
FLASH	128M
MAC	8K
Buffer Memory	4M

Jumbo Frame	9.6K
LED Indicator	Fiber port: L/A (Green), PoE: PoE (Green) Power: PWR (Yellow), System: SYS (Yellow), Network: Link (Yellow)
Reset Switch	Yes, (Press and hold for 10 seconds and release, the switch will restore the factory settings)
PoE & Power Supply	
PoE Port	Port 1 to 8, IEEE 802.3 af/at/bt
PoE Management	Port PoE working status display Port PoE output priority configuration PoE power supply total power limit configuration Power delay start, PoE work and time scheduling Port PoE output power distribution, PoE on/off, af/at/bt power distribution
Power Supply Pin	1/2(+)3/6(-) 4/5(+)7/8(-)
Max Power Per Port	90W, IEEE 802.3 af/at/bt
Power Consumption	Standby<8W, Full load<480W
Working Voltage	DC48-57V, 6 Pin industrial Phoenix terminal, support anti-reverse protection.
Power Supply	No, optional 48V/240W or 48V/480W industrial power supply
Physical Parameter	
Operation TEMP / Humidity	-40°C~+80°C, 5%~90% RH Non condensing
Storage TEMP / Humidity	-40°C~+85°C, 5%~95% RH Non condensing
Dimension(L*W*H)	165*148*54mm
Net /Gross Weight	<0.8kg / <1.2kg
Installation	Desktop, 35mm DIN rail
Certification & Warranty	

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Lightning Protection	Protection level: IP40
	Lightning protection: 6KV 8/20us
	IEC61000-4-3 (RS):10V/m (80~1000MHz)
	FCC Part 15/CISPR22 (EN55022): Class B
	IEC61000-6-2 (Common Industrial Standard)
	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
	IEC61000-4-4(EFT): Power cable: ±4kV, data cable: ±2kV
	IEC61000-4-16 (Common-mode transmission): 30V, 300V, 1s
	IEC61000-4-2 (ESD): ±8kV contact discharge, ±15kV air discharge
	IEC61000-4-6 (Radio frequency transmission): 10V(150kHz~80MHz)
	IEC61000-4-8 (Power frequency magnetic field): 100A/m, 1000A/m,1s to 3s
	IEC61000-4-5 (Surge): Power cable: CM±4kV/ DM±2kV, data cable: ±4kV
Mechanical Properties	IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Network Management Features	
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, mini particle size is 64Kbps.
Layer 3 Features	ARP protocol max 1024 entries
	Static routing/ default routing max 128 entries
	L2+ network management, IPV4/IPV6 dual stack management
	L3 routing and forwarding, and communication between different

	network segments and different VLAN
VLAN	Access, Trunk, and Hybrid port configurations
	Port-based VLAN (4K), IEEE802.1q, QinQ configuration
	Voice VLAN, Protocol-based VLAN, MAC address-based VLAN
Port Aggregation	LACP dynamic aggregation, Static aggregation
	Max 5 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Industrial Ring Network Protocol	Recovery time less than 20ms
	G.8032 (ERPS), 250 Ring at most, Max 250 devices per ring.
Multicast	MLD Snooping v1/v2, Multicast VLAN, Fast log out
	IGMP Snooping v1/v2/v3, Max 1024 multicast groups
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based redirection, Flow-based rate limiting
	Flow-based packet filtering, Priority Mark/Remark
	8*Output queues of each port, 802.1p/ DSCP priority mapping
	Queue Scheduling Algorithm (SP, WRR, SP+WRR), Diff-Serv QoS
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	SSH 2.0, SSL, Port isolation, ARP message speed limit
	User hierarchical management and password protection
	AAA & RADIUS & TACACS+ certification, MAC learning limit
	IEEE802.1X & MAC address authentication, ARP inspection
	IP-MAC-VLAN-Port binding, Anti-DoS attack, IP source protection
	Broadcast storm control, Backup for host datum, Mac black holes
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
Management	Web network management (https)
	View CPU real-time utilization status
	Link Layer Discovery Protocol (LLDP)
	NTP clock, SNMP V1/V2/V3, System work log

	One click recovery, Ping detection, Cable status check
	Console/ AUX Modem/ Telnet/ SSH2.0 and CLI configuration
	FTP, TFTP, Xmodem, SFTP file upload and download management
System	Category 5 and above Ethernet cables
	Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, Microsoft Internet Explorer 10 or higher
	TCP/IP, network adapters, and network operating systems (such as Microsoft Windows, Linux, or Mac OS X) are installed on each computer in the network over Category 5 and above Ethernet cables.

DIMENSION

APPLICATION
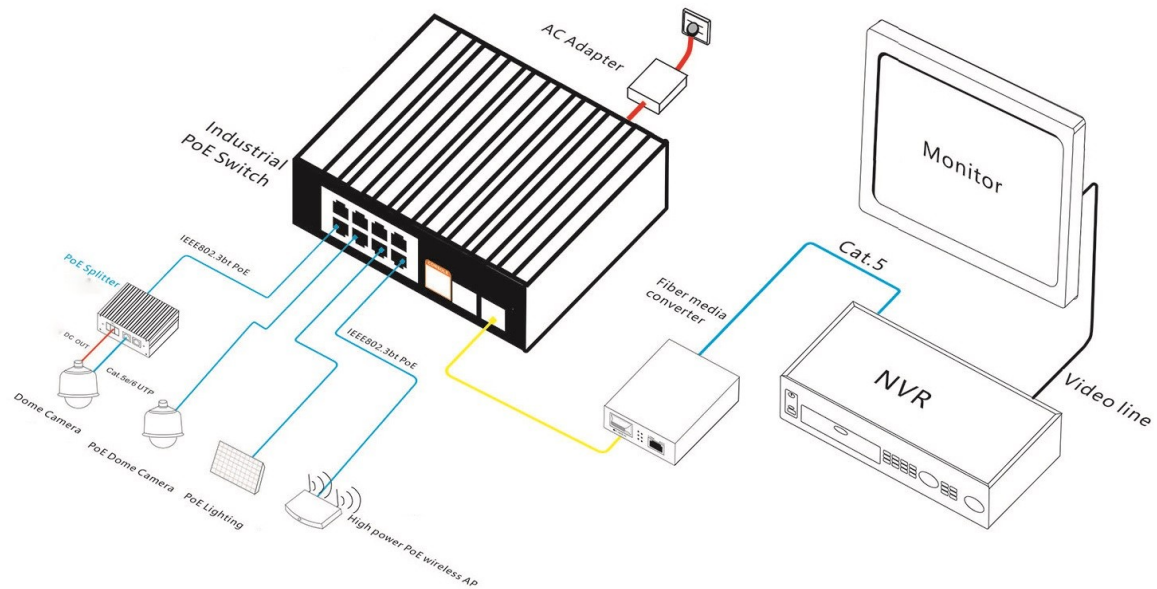
ORDERING INFORMATION

Model	Description	Recommended Power Supply
SUN-IPS33108PFM-bt	L2+ managed industrial bt PoE switch with 8*10/100/1000M RJ45 ports and 2*100/1000M uplink SFP ports. Port 1-8 support IEEE 802.3 af/at/bt PoE standard. It can support dual DC power input and DIN rail mounting.	240W/480W
Note: The SFP optical module and power supply are not included by default and need to be purchased.		

OPTICAL MODULE

Product	Model	Description	Unit
1.25G Optical Module	SUN-2630-G	Industrial SFP optical module, 1.25G multi-mode dual fiber 850nm, transmission distance: 550m, LC interface. supports DDM function and hot plugging.	PC
	SUN-2632-G	Industrial SFP optical module, 1.25G single-mode dual fiber 1310nm, transmission distance: 20km, LC interface. supports DDM function and hot plugging.	PC
	SUN-2612-T-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, LC interface. supports DDM function and hot plugging.	PC
	SUN-2613-R-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, LC interface. supports DDM function and hot plugging.	PC
	SUN-2612-T-G-SC	Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, SC interface. supports DDM function and hot plugging.	PC
	SUN-2613-R-G-SC	Industrial SFP optical module, 1.25G single-mode single fiber TX1550nm/ RX1310nm, transmission distance: 20km, SC interface. supports DDM function and hot plugging.	PC
Power Module	SUN-2633	1.25G SFP optical module transfers to 10/100/1000M RJ45 port.	PC

POWER SUPPLY

Product	Model	Description	Unit
240W DIN Rail Industrial Power Supply	SUN-DP240-48	Din Rail 240W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 3.0A Output Voltage: DC48V, 5A Operation Temperature: -40°C to +70°C	PC
480W DIN Rail Industrial Power Supply	SUN-DP480-48	Din Rail 480W single set of output power supply Input Voltage: AC100V-240V 50-60Hz, 5.0A Output Voltage: DC48V, 10A Operation Temperature: -40°C to +70°C	PC