

### **Product Datasheet**

# 6-port Gigabit Managed Industrial PoE Switch

(GWS-IPS33006PFM)



### **OVERVIEW**

The GWS-IPS33006PFM is a Gigabit managed industrial PoE switch. It has 4\*10/100/1000M adaptive RJ45 ports and 2\*100/1000M uplink SFP fiber ports. Port 1-4 can support IEEE 802.3 af/at PoE standard and single-port PoE power up to 30W. As a PoE power supply device, it can automatically detect and recognize the power-receiving equipment that meets the standard and supply power through the network cable. It can supply power to PoE terminal equipment such as wireless AP, IP cameras, VoIP phones, and industrial sensors through a network cable, and meet the network environment that needs a high-density PoE power supply. It is suitable for intelligent transportation, rail transit, electric power, mining, metallurgy, and green energy, industrial scenes such as construction setting up a cost-effective and stable communication network.

The GWS-IPS33006PFM has L2+ network management functions. It can support IPV4 management and static routing forwarding, complete security protection mechanisms, complete ACL/ QoS policies, and rich VLAN functions, making it easy to manage and maintain. Supports multiple network redundancy protocols RSTP (<50ms) to improve link backup and network



reliability. When a one-way network fails, communication can be quickly restored to ensure uninterrupted communication of important transmissions. According to application needs, PoE power supply management, port flow control, VLAN division, QoS, and other application service configurations can be performed through network management methods such as Web, CLI, SNMP, and Telnet.

### **FEATURE**

### ■ Gigabit access, uplink SFP fiber port

- ♦ Support non-blocking wire-speed forwarding.
- ♦ Support full-duplex based on IEEE 802.3x and half-duplex based on Backpressure.
- Support Gigabit RJ45 port and SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.

#### ■ Smart PoE power supply

- Comply with IEEE 802.3 af/at PoE power supply standard, automatically identify PoE equipment for power supply.
- Support PoE network management function, port power status viewing, etc. through network management configuration.
- ♦ 4\*10/100/1000Base-T RJ45 ports support PoE power, meeting the PoE power requirements of security monitoring, industrial automation systems, wireless coverage, and other scenarios.

#### Strong business processing capability

- ♦ Support IEEE 802.1Q VLAN.
- ♦ Ring network RSTP spanning tree protocol eliminates layer 2 loops and realizes link backup.
- Support IGMP Snooping V1/V2 to meet the needs of multi-terminal high-definition video surveillance and video conferencing access.
- Support QoS, three priority modes based on port, 802.1P-based and DSCP-based, and four queue scheduling algorithms: SP, WRR, and WFQ.
- Static aggregation and dynamic aggregation effectively increase link bandwidth, achieve load balancing, and link backup, and improve link reliability.



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

#### Security

- ♦ Port isolation and storm control.
- ♦ 802.1X authentication provides authentication functions for LAN computers and controls the authorization status of controlled ports according to the authentication results.

#### ■ Stable and reliable

- ♦ CCC, CE, FCC, RoHS.
- ♦ The user-friendly pane can show the device status through the LED indicator of PWR, SYS, Link, L/A, and PoE.
- ♦ Low power consumption, no fan, aluminum housing, and excellent heat dissipation to ensure the stable operation of the switch.

#### ■ Easy O&M management

- ◇ CPU monitoring, memory monitoring, and Ping detection.
- ♦ System logs and port traffic statistics facilitate network optimization and transformation.
- ♦ LLDP facilitates the network management system to query and determine the communication status of the link.
- Web network management, CLI (Console, Telnet), SNMP (V1/V2/V3), Telnet, and other diversified management and maintenance methods.

### **TECHNICAL SPECIFICATION**

Model GWS-IPS33006PFM		
Interface Characteristics		
Fixed Port	1*RS232 Console port (115200,N,8,1)	
	4*10/100/1000Base-T PoE ports (Data/ Power)	



	2*100/1000Base-X uplink SFP fiber ports (Data)		
	2 sets V+, V- redundant DC power port (5P Phoenix terminal)		
Ethernet Port	Port 1-4 support 10/100/1000Base-T auto-sensing, full/ half duplex MDI/		
Ethernet Port	MDI-X self-adaption		
Twisted Dair	10BASE-T: Cat3,4,5 UTP (≤100 meters)		
Twisted Pair	100BASE-TX: Cat5 or later UTP (≤100 meters)		
Transmission	1000BASE-T: Cat5e or later UTP (≤100 meters)		
Ontinal Fiber Port	Gigabit optical fiber port, default no include optical modules (optional		
Optical Fiber Port	single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)		
Outing Cable/Distance	Multi-mode: 850nm/ 0-550m, Single-mode: 1310nm/ 0-40km, 1550nm/		
Optical Cable/ Distance	0-120km.		
Chip Parameter			
Network Management			
Туре	L2+		
Naturalis Durata and	IEEE 802.3 10BASE-T, IEEE 802.3i 10Base-T, IEEE 802.3u 100Base-TX,		
Network Protocol	IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3x		
Forwarding Mode	Store and Forward (Full Wire Speed)		
Switching Capacity	12Gbps (non-blocking)		
Forwarding Rate	0.00Mana		
@64byte	8.93Mpps		
CPU(Hz)	500M		
DRAM	1G		
Flash	128M		
MAC	8K		
Buffer Memory	4M		
1501 " 1	Power: PWR (Yellow), System: SYS (Yellow), Network: Link (Yellow),		
LED Indicator	Fiber port: L/A (Green), PoE: PoE (Green)		
PoE & Power Supply			
PoE Port	Port 1-4		



PoE Management	Port PoE working status display, Port PoE output power distribution, PoE			
1 OL Management	on/off, af/at power distribution			
Power Supply Pin	1/2(+) 3/6(-)			
Max Power Per Port	30W, IEEE 802.3 af/at			
Power Consumption	Standby<6W, Full load af<60W, at<120W			
Input Voltage/ Interface	DC48-57V, 5P industrial phoenix terminal, support anti-reverse protection			
Power Supply	No, optional 48V/60W or 48V/120W industrial power supply			
Physical Parameter				
Operation TEMP /	40. LOO°C FO/ OOO/ DIL Non condensing			
Humidity	-40~+80°C, 5%~90% RH Non condensing			
Storage TEMP /	40-195°C 50/-050/ DH Non condensing			
Humidity	-40~+85°C, 5%~95% RH Non condensing			
Dimension (L*W*H)	145*134.5*47mm			
Net /Gross Weight	0.7kg / 0.9kg			
Installation	Desktop, 35mm DIN Rail			
Certification & Warranty				
	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			
Lightning Protection	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-3s			



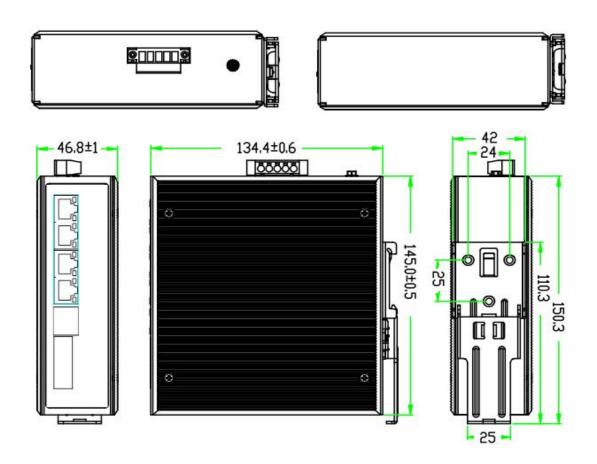
	IEC61000-4-5 (Surge): Power cable:CM±4kV/ DM±2kV, data cable: ±4kV	
Mechanical Properties	IEC60068-2-6 (Anti Vibration), IEC60068-2-27 (Anti Shock),	
	IEC60068-2-32 (Free Fall)	
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B,	
Certification	RoHS	
Warranty	5 years, lifelong maintenance.	
Network Management I	Feature	
	IEEE802.3x flow control (Full duplex)	
	Broadcast storm suppression based on port rate	
Interface	Port real-time traffic management (Flow Interval)	
	Limit the rate of packet traffic on incoming and outgoing ports, mini	
	granularity is 16Kbps and max is 1Gbps	
L3 Feature	IPV4 static route/ default route	
VLAN	Port-based VLAN (4K), VLAN based on the protocol	
VEAIN	IEEE802.1q, Port configuration of Access, Trunk, Hybrid	
Port Aggregation	LACP dynamic aggregation, Static aggregation	
Tort Aggregation	Max 3 aggregation groups and 8 ports per group	
Spanning Tree	RSTP (IEEE 802.1w)	
ERPS	ERPSv2	
Multicast	Multicast VLAN, User quick exit mechanism, IGMP Snooping v1/v2	
Port Mirroring	Bidirectional data mirroring based on port	
	802.1p/ DSCP priority mapping, Diff-Serv QoS	
QoS	Queue scheduling algorithm (SP, WRR, WFQ)	
QUS	Flow-based rate limiting, Flow-based packet filtering	
	Flow-based based redirection, 8*Output queues of each port	
	Port-based and VLAN-delivered ACL	
ACL	The L2-L4 packet filtering function can match the first 80 bytes of the	
/ IOL	packet and provide information based on source MAC address,	
	destination MAC address, source IP address, destination IP address, IP	



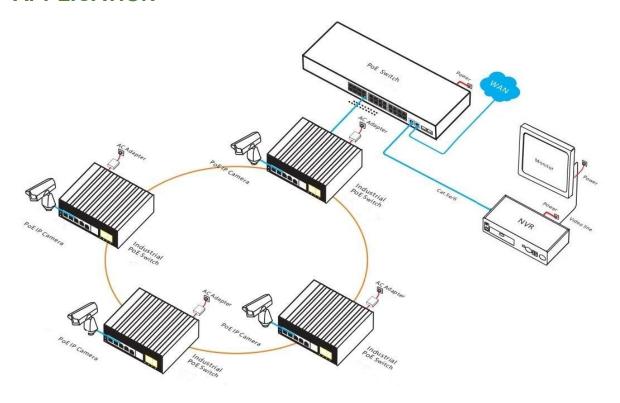
	protocol type, TCP/UDP port, TCP/UDP port range to define the ACL.			
O it	Port isolation, Port broadcast message suppression			
	Port-based and Mac-based IEEE802.1X certification			
Security	User hierarchical management and password protection			
	AAA&RADIUS certification, IP source address protection			
DHCP	DHCP Client, DHCP Snooping			
	Web network management (https), Ping detection			
	NMS platform cluster management (LLDP+SNMP)			
Managamant	One click recovery, View CPU real-time utilization status			
Management	Link Layer Discovery Protocol (LLDP), System work log			
	Console/ Telnet and CLI configuration, SNMP V1/V2/V3			
	NTP clock, HTTP file upload and download management			
	Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher,			
	Cat5 and above Ethernet cable			
System	TCP/IP, network adapter, and network operating system (such as			
	Microsoft Windows, Linux, Mac OS X) installed on each computer in the			
	network Cat5 and above Ethernet cable			



# **DIMENSION**



# **APPLICATION**





# **ORDERING INFORMATION**

Model	Description	Recommended Power Supply
GWS-IPS33006PF M	L2+ managed industrial PoE fiber switch with 4*10/100/1000M RJ45 ports and 2*100/1000M uplink SFP fiber ports. Port 1-4 can support IEEE 802.3 af/at PoE standard. It can support dual DC power input and DIN rail mounting.	60W/120W

**Note:** The optical module and power supply are not included and need to be purchased.

# **PACKING LIST**

	Content	Qty	Unit
Packing List	6-port gigabit managed industrial PoE switch	1	SET
	RJ45-DB9 Adapter Cable		PC
	User Guide	1	PC
	Warranty Card and Certificate of Conformity	1	PC

## **OPTICAL MODULE**

Product	Model	Description	Unit
4.050	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
1.25G Optical Module	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
	2612-T-G	Industrial SFP optical module, 1.25G single-mode single fiber TX1310nm/ RX1550nm, transmission distance: 20km, LC	PC



		interface, supports DDM function and hot plugging.	
		Industrial SFP optical module, 1.25G single-mode single fiber	
	2613-R-G	TX1550nm/ RX1310nm, transmission distance: 20km, LC	PC
		interface, supports DDM function and hot plugging.	
		Industrial SFP optical module, 1.25G single-mode single fiber	
	2612-T-SC-G	TX1310nm/ RX1550nm, transmission distance: 20km, SC	PC
		interface, supports DDM function and hot plugging.	
		Industrial SFP optical module, 1.25G single-mode single fiber	
	2613-R-SC-G	TX1550nm/ RX1310nm, transmission distance: 20km, SC	PC
		interface, supports DDM function and hot plugging.	
Power	2633	1.25G SFP optical module transfers to 10/100/1000M RJ45	PC
Module	2000	port.	70

# **POWER SUPPLY**

Product	Model	Description	Unit
65W Desktop Power Adapter	AP65-52	Desktop 65W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 1.1A Output Voltage: DC52V, 1.25A Operation Temperature: -20℃ to +65℃	PC
110W Desktop Power Adapter	AP110-52	Desktop 110W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 2.0A Output Voltage: DC52V, 2.15A Operation Temperature: -20℃ to +65℃	PC
60W DIN Rail Industrial Power Supply	DP60-48	DIN Rai 60W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 1.0A Output Voltage: DC48V, 1.25A Operation Temperature:-40℃ to +70℃	PC
120W DIN Rail	DP120-48	DIN Rail 120W single set of output power supply	PC



Industrial Power

Input Voltage: AC100V~240V 50-60Hz, 2.3A

Supply

Output Voltage: DC48V, 2.5A

Operation Temperature: -40°C to +70°C

# **Contact Us**



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