

# INDUSTRIAL SWITCH PRODUCTS

Industrial Gigabit L2+ managed POE switch, 4 10/100/1000Mbps RJ45 ports, 2xGigabit SFP



## PRODUCT DESCRIPTION

IPS-M4GT-2SFP is a full Gigabit managed industrial PoE switch with 4 10/100/1000M PoE ports and 2 10/100/1000M SFP fiber ports. 4 electrical ports can support IEEE 802.3af/at standard PoE power supply with a total power of 130W. It supports IEEE802.3, IEEE802.3i, IEEE802.3u, IEEE802.3x, IEEE802.3z, IEEE802.3ab, IEEE802.3af, IEEE802.3at. protocol standards and complies with CE, ROHS, FCC, UKCA.

## FEATURE

- Provide 4 10/100/1000Mbps RJ45 ports, 2 SFP fiber ports.
- Support IEEE802.3, IEEE802.3i, IEEE802.3u, IEEE802.3x, IEEE802.3z, IEEE802.3ab, IEEE802.3af, IEEE802.3at.
- 4 PoE ports support 802.3af/at, per PoE power port up to 30W Poe budget.
- Support IPv4/IPv6 Static Routing, Address Resolution Protocol (Static ARP).
- Support non-blocking wire speed forwarding.
- IP30 protection grade, and ensures the stable operation of the equipment in bad environment.

## APPLICATIONS

Specifically Designed for Industrial Environments Widely used to build a cost-effective, stable and reliable communication network for a variety of industrial scenarios.

- Energy
- Transportation
- Shipping
- Oil
- Mining
- Metallurgy



## TECHNICAL SPECIFICATION

Power Supply	44~ 57 VDC/ 3A(MAX)
Standards	IEEE 802.3, 802.3i, 802.3u, 802.3x, 802.3z, 802.3ab, 802.3af, 802.3at
Ports	4×10/100/1000Mbps RJ45 ports+2×SFP ports
Indicators	Speed 1000M (green), network Indicator: Link (yellow), SFP Indicator: L/A (green)
Ethernet Port Feature	10/100/1000BaseT (X) automatic detection, full / half duplex MDI/MDI-X adaptive
SFP Port Characteristic	Gigabit SFP fiber interfaces, default matching optical modules, need to buy separately, (optional order mode / multi-mode, single fiber / double fiber optical modules).
Forwarding Mode	Store and Forward(Full Wire Speed)
Dimensions	136 mm *108 mm *38.5 mm
PoE port	4 802.3at/af standard POE
Max / Average Power Port	30W per port
Power Consumption	Standby:<10W(NOT PoE);Full load:<130W(with PoE)
MAC Address Table	8K
Switching Capacity	128Gbps
Packet Forwarding Rate	8.928Mpps
Packet Buffer	4Mbit
LED Indicator	Power/ System : SYS (green) , Network: Link (yellow), fiber port: L/A (green), PoE: PoE (green)
Net /Gross Weight	<1.2kg / <1.5kg
Environment	Operating Temperature: -40°C — 75°C (-40°F~167°F) Storage Temperature:-40°C — 85°C (-40°F ~185°F) Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~90% non-condensing
Warranty	3 years , lifelong maintenance

## Certification & Warranty

<b>Lightning protection / protection level</b>	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)
<b>Mechanical Properties</b>	IEC60068-2-6 (anti vibration) IEC60068-2-27 (anti shock) IEC60068-2-32 (free fall)
<b>Certification</b>	CCC; CE mark, commercial; CE/LVD EN60950; FCC Part 15 Class B; RoHS;
<b>Warranty</b>	3 years

## Network Management Features

<b>Interface</b>	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.
<b>Layer 3 Features</b>	L2+ network management, IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR @ 1024 pcs
<b>VLAN</b>	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
<b>Port Aggregation</b>	IEEE 802.3ad, LACP, Static aggregation Max 7 aggregation groups and 8 ports per group.
<b>Spanning Tree</b>	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
<b>Industrial Ring Network Protocol</b>	G.8032 (ERPS), Recovery time less than 20ms 250 Ring at most, Max 1024 devices per ring.

<b>Multicast</b>	MLD Snooping v1/v2, Multicast VLAN IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
<b>Port Mirroring</b>	Bidirectional data mirroring based on port
<b>QoS</b>	Flow-based Rate Limiting Flow-based Packet Filtering 8*Output queues of each port 802.1p/DSCP priority mapping ToS, Diff-Serv QoS, Priority Mark/Remark Queue Scheduling Algorithm (SP, WRR, SP+WRR)
<b>ACL</b>	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.
<b>Security</b>	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
<b>DHCP</b>	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
<b>Management</b>	One-key recovery Cable Diagnose, LLDP Web Management (HTTPS) NTP, System work log, ICMP, Ping Test CPU instant utilization status view Console/AUX Modem/Telnet/SSH2.0 CLI Download & Management on FTP, TFTP, Xmodem, SFTP, SNMP V1/V2C/V3 ONV NMS - smart network management system platform (LLDP+SNMP)
<b>System</b>	Category 5 Ethernet network cable  Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome 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

## ORDER INFORMATION

PRODUCT	PART NUMBER
Industrial Gigabit L2+ managed POE switch, 4 10/100/1000Mbps RJ45 ports, 2xGigabit SFP	IPS-M4GT-2SFP