



**24-Port Gigabit Managed
Industrial Switch
IS1024GS-8F-4TF**



Product Introduction:

IS1024GS-8F-4TF is a 24-port gigabit managed industrial Ethernet switch with 16 gigabit RJ45 ports, 8 SFP combo ports, 4 10G SFP+ optical ports. EMC industrial level 4 protection performance; Corrugated high-strength aluminum profile shell, IP40 grade, low-power design, rack mounted, with a working temperature of -40 °C -75 °C, suitable for working in harsh environments; IS1024GPS-8F-4TF can also support rich network management functions: RUN Ring (Self healing time<10ms), RSTP, VLAN, QoS, SNMPv1/v2c/v3, IEEE802.1X, SSH/SSL, port mirroring, port aggregation, and other rich redundancy, switching, and security management features make it a reliable solution for intelligent transportation, video surveillance, and other harsh industrial environments.

Features:

Standards

- IEEE 802.3: Ethernet Media Access Control (MAC) Protocol
- IEEE 802.3i: 10BASE-T Ethernet
- IEEE 802.3u: 100BASE-TX Fast Ethernet
- IEEE 802.3ab: 1000BASE-T Gigabit Ethernet
- IEEE 802.3z: 1000BASE-X Gigabit Ethernet (fiber)
- IEEE 802.3ad: A standard method for performing link aggregation
- IEEE 802.3x: Flow Control
- IEEE 802.1p: LAN Layer 2 QoS/CoS protocol for traffic priority (multicast filtering function)
- IEEE 802.1q: VLAN Bridge Operation
- IEEE 802.1d: STP Spanning Tree
- IEEE 802.1s: MSTP Spanning Tree
- IEEE 802.1w: RSTP Spanning Tree

Switching characteristics

- MAC address table : 16K
- Port buffer : 12 Mb
- 100M forwarding speed: 148810pps
- Gigabit forwarding speed: 1488100pps
- Maximum filtering speed at 100M: 148810pps
- Gigabit maximum filtering speed: 1488100pps
- Transmission mode: store and forward
- Backplane bandwidth: 128 Gbps
- Switching Delay: <5us

Communication Interface

Optical port : 8*1000Base-X (SFP) Combo ports, 4*10G SFP+ ports
RJ45 port : 24*10/100/1000Base-Tx RJ45 ports

Front panel indicator

Power indicator: P1, P2
System indicator: SYS
Alarm indicator: ALM
Interface indicator: Link & Act F1~ F4
Network port indicator: Link&Act 1~24

Power supply

Input voltage: 12-56 V DC
Input mode: pluggable 5-core 5.08 mm pitch terminal block
Support dual DC power backup, built-in overcurrent protection
Power supply supports reverse polarity protection

Power consumption (optional)

No-load power: 15W@52V DC
Full load power: 30W@52V DC

Physical properties

Housing: IP40 protection, corrugated high-strength metal housing
Installation: Rack installation
Dimensions (L × W × H): 440 mm × 320 mm × 44 mm
Weight: 3kg



Industry standard

EMI:FCC CFR47 Part 15, EN55022/CISPR22, Class A

EMS:

IEC61000-4-2 (ESD): $\pm 8\text{kV}$ (contact), $\pm 15\text{kV}$ (air)

IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)

IEC61000-4-4 (EFT): Power Port: $\pm 4\text{kV}$; Data Port: $\pm 2\text{kV}$

IEC61000-4-5 (Surge): Power Port: $\pm 2\text{kV/DM}$, $\pm 4\text{kV/CM}$; Data Port: $\pm 6\text{ kV}$

IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)

IEC60068-2-6 (Vibration)

IEC60068-2-27 (Shock)

IEC60068-2-32 (Free Fall)

Working environment

Operating temperature: $-40 \sim 75\text{ }^{\circ}\text{C}$

Storage temperature: $-40 \sim 75\text{ }^{\circ}\text{C}$

Relative humidity: $5\% \sim 95\%$ (no condensation)

Certification

CE, FCC, RoHS

Mean time between failures

360,000 hrs

Installation method:

Before installation, you must confirm the operating environment of the equipment: power supply voltage, installation space, installation method, etc. Please carefully confirm the following installation requirements:

- ✧ Check that the required cables and connectors are present for installation
- ✧ According to reasonable configuration requirements, check whether the cables are in place (no more than 100m)
- ✧ The product does not provide installation components. Users need to prepare the components of the selected installation type: screws, nuts and tools, etc. to ensure reliable installation

Power requirement: 12-56V DC

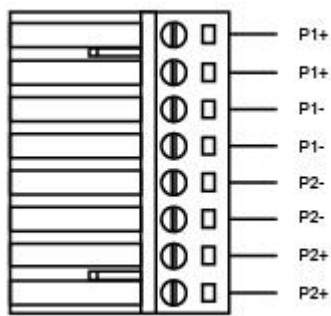
Environmental requirements :

Working temperature: $-40 \sim 75\text{ }^{\circ}\text{C}$

Storage temperature: $-40 \sim 75\text{ }^{\circ}\text{C}$

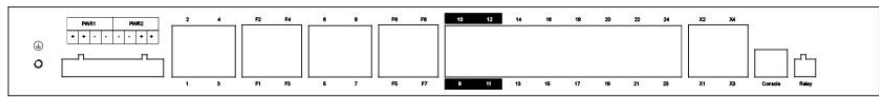
Relative humidity: 5% to 95% (no condensation)

Power access



- 5pin 5.08mm terminal
- Input range: 12-56VDC
- P1&P2 dual redundant power supply
- Support reverse connection protection function

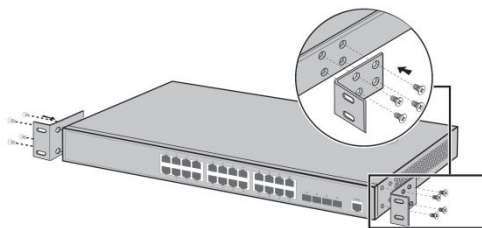
Ground protection



Connect a lightning protection grounding cable. Connect one end of the grounding cable to the lightning protection grounding terminal of the switch and the other end to the terminal blocks of the grounding bar in the housing project .

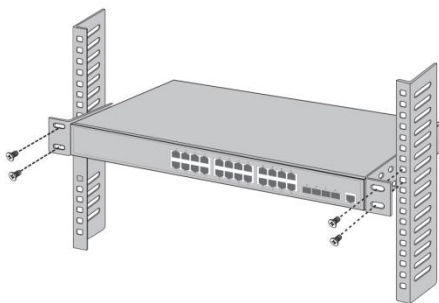
Rack Mount

- 19-inch standard rack installation
- IS1024GS-8F-4TF is designed according to the size of a 19- inch standard rack and can be easily installed on the rack. The specific installation steps are as follows:
1. Check the grounding and stability of the rack;
 2. The two L- shaped brackets on both sides of the switch panel and secure them with the screws provided in the accessories.



3. Place the switch in a proper position in the rack and support it with the bracket; Use screws to fix the L-shaped brackets to the guide slots at both ends of the rack to ensure the stability of the switch.

Install horizontally on the rack.



Notice:

Good rack grounding is an important guarantee for equipment anti-static, anti-leakage, lightning protection, and anti-interference. Therefore, ensure that the rack grounding wire is properly installed.

Equipment is usually installed from bottom to top in the rack to avoid overloading;
 Avoid placing other heavy objects on the switch surface to avoid accidents;
 Ensure heat dissipation and air circulation.