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24 Ports Gigabit Managed Industrial PoE Switch

IS1024GPS-8F-4TF

Product brochure

Product Introduction

IS1024GPS-8F-4TF is a 24-port gigabit managed industrial Ethernet switch with 16 gigabit PoE RJ45 ports,8 SFP combo ports, 4 10G SFP+ optical ports. Among them, four POE ports can provide up to 90W of power and are suitable for IEEE802.3af/at/bt compatible power receiving devices (PDs), especially suitable for scenarios where it is difficult to provide AC power and require high wiring costs. 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℃ -75 ℃, 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.

Highlights

Port 6KV lightning protection

• All ports support 6KV lightning protection, PSE short circuit protection, PoE overload, power supply over temperature protection, over voltage protection, surge current protection and other protection features.

Powerful application capabilities

• Support 802.1Q VLAN, MAC VLAN, IP VLAN, users can divide VLAN flexibly as needed.
• Support QoS, 8 port queues, support port priority, 802.1P priority, DSCP priority, support SP, WRR, SP+WRR, WFQ priority scheduling algorithm.
• Support ACL, support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function, provide flexible and secure access control policy.
• Supports IGMP v1/v2/v3 Snooping and MLD v1/v2 Snooping to meet the requirements of multi-terminal HD video surveillance or video conferencing.
• It supports the fast leave mechanism and querier of Layer 2 multicast, and supports Layer 2 IPv4 static multicast and Layer 2 IPv6 static multicast.
• Support RIP dynamic routing protocol, solve the routing problem after the small and medium-sized network is divided into subnets, and simplify the network configuration.
• Support static routing protocol, and manually configure routing entries to realize communication between different network segments. • Support ARP configuration, so that hosts in different physical networks on the same network segment can communicate normally.

Full security mechanism

• Completed security authentication mechanism: It supports IEEE 802.1x, Radius, Tacacs+, etc.
• The loop detection mechanism can ensure the stable operation of the network for a long time.
• High security features such as port isolation in VLAN, DHCP-Snooping and IP+MAC+port binding, etc., to further ensure user data security.
• Support multi protections like ARP, IP source and DoS.
• Support declining user access by the port numbers, IP address, and MAC address.

Diverse reliability protection

• Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocols to eliminate Layer 2 loops and implement link backup.
• Supports loop protection, root bridge protection, TC protection, BPDU protection, and BPDU filtering.
• Supports relay alarm output functions such as power failure, port disconnection, and PoE power supply abnormality.
• EMC Class4 and anti-jamming capability.

Powerful POE

• Support the 802.3af/at standard and has a built-in high-power power supply to meet the needs of POE scenarios such as CCTV, wireless coverage, and IP telephony.
• Support PoE power limit, and set the priority of PoE ports. When the power exceeds the limit, the high-priority ports have priority.
• Support setting the time period of PoE power supply, and users can adjust it according to the real needs.
• Support to check the status of PoE chip like temperature, output power and other parameters in real time through the web page.

Flexible and convenient management and maintenance

• Support various management methods such as Console, Telnet, and SSH.
• Support simple and efficient WEB management (HTTP, HTTPS, SSL V3)
• Support TFTP mode to upload and download files.
• Support SNMP V1/V2/V3
• Support Hored Apollo cloud platform, which can realize all-round remote operation and maintenance such as automatic device discovery, network topology management, and remote configuration management of devices.

Compliance

EMI: FCC CFR47 Part 15, EN55022/CISPR22, Class A
EMS:
IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)
IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)
IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±6kV
IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
IEC60068-2-6 (Vibration)
IEC60068-2-27 (Shock)
IEC60068-2-32 (Free Fall)

Specifications

Hardware	
Network Interface	● 16-Port 10/100/1000Mbps PoE RJ45 ● 8-Port 1000Mbps SFP combo ports ● 4-Port 10G SFP+ ports ● Console ports x1
Network Protocol	● IEEE802.3、IEEE802.3i、IEEE802.3u、IEEE802.3ab、IEEE802.3z、IEEE802.3ad、IEEE802.3x、IEEE802.3af/at、IEEE802.1p、IEEE802.1q、IEEE802.1w、IEEE802.1d、IEEE802.1s,IEEE 802.3af、IEEE 802.3at、IEEE 802.3bt
Performance	● Switching capacity: 128Gbps (Non-Block) ● Forwarding rate: 95.2Mpps ● MAC table: 16K ● Packet buffer：12Mb ● Forwarding Type: Storage and Forwarding
LED Indicator	● Power Indicator：P1,P2 ● System Indicator：SYS ● Alarm Indicator：ALM ● SFP Port Indicator：Link&Act F1~F4 ● RJ45 Port Indicator：POE&Link&Act 1~24
POE Pin	● Port 9-12 1/2/4/5(+), 3/6/7/8(-); ● Port 13-24 1/2(+) , 3/6/(-) ;
Power Supply	● Input voltage: 48-56V DC ● Input port: Pluggable 5 pin terminals block, 5.08mm pitch (support dual DC power source backup, built-in overcurrent protection, support anti-reverse connection) ● No-load power:15W@52V DC ● Full load power: 400W@52V DC (POE full load output) ● Max. power for single port: 90W,9-12 port 90W,13-24 port 30W
Physical Parameter	● Casing：Corrugated high-strength metal housing, IP40 ● Installation：Rack ● Dimension（LxWxH）：440mm×320mm×44mm
Environmental Condition	● Operating Temperature：-40〜75℃ ● Storage Temperature：-40〜85℃ ● Operating Humidity: 5%〜95% RH (non-condensing) ● Storage Humidity: 0%〜95% RH (non-condensing)
Certification	● CE/ROHS/FCC

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Software Specifications:	
Protocol Standards	IEEE 802.3:Ethernet media access control (MAC)
	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（optical fiber）
	IEEE 802.3ad:Standard method of link aggregation
	IEEE 802.3x:Flow control
	IEEE 802.1p:LAN layer 2 qos/cos protocol related to 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
	IEEE 802.3af/at/bt
L3 Interface	Support L3 interface
	Support IPV4,IPV6 addresses configuration
	Support ARP configuration
	Support ND configuration
L3 Routing	Support IPV4 static routing
	Support IPV4 RIP v1/v2
	Support IPV4 OSPFv2
	Support IPV6 static routing
	Support IPV6 RIPng
	Support IPV6 OSPFv3

Software Specifications:	
VLAN	Support 4K VLAN
	Support 802.1Q VLAN,MAC VLAN ,IP VLAN，Voice VLAN
DHCP	Support DHCP server
	Support DHCP relay
	Support DHCP Snooping
MAC Table	Support IEEE 802.1d standard
	Support MAC addresses automatic learning and aging
	Support static, dynamic and filtered address tables
Security Features	Password guard
	Support restricting user access based on port number, IP address and MAC address
	Support HTTPS,SSL V3,TLS V1,SSH V1/V2
	Support IP-MAC-PORT ternary binding
	Support ARP protection, IP source protection, DOS protection
	Support DHCP Snooping,DHCP Attack protection
	Support 802.1X certification,AAA
	Support Port security, port isolation
	Support CPU Protection function
POE	Support PoE power limit
	Support PoE chip status check
	Support setting PoE port priority
	Support setting PoE power supply time period
	Support intelligent power supply
ACL	Support L2(Layer 2)～L4(Layer 4) packet filtering function
	Support Port mirroring, flow speed restriction, QoS re marking
QoS	Support 8 port queues
	Support port priority, 802.1p priority, DSCP priority
	Support SP,WRR,SP+WRR,WFQ priority scheduling
STP	Support STP(IEEE 802.1d)，RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) standard
	Support Loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering
	Support optical port 50ms switching

Software Specifications:	
Multicast	Support IGMP v1/v2/v3 Snooping Support MLD v1/v2 Snooping Support Fast leave mechanism and querier of layer 2 multicast Support Layer 2 IPv4 static multicast Support Layer 2 IPv6 static multicast Support IGMP v1/v2/v3 layer 3 multicast
Storm Suppression	Support Multicast suppression Support Broadcast suppression Support Unknown unicast suppression
LACP	Support Static convergence Support Dynamic convergence Support based on IP, MAC and mixed load balancing mode Support 32 aggregation groups at most
IPv6	Support IPv6 Ping,IPv6 Tracert,IPv6 Telnet Support IPv6 SSH,IPv6 SSL
Network management	Support WEB management（HTTP,HTTPS,SSL V3) Support CLI（Telnet,SSH V1/V2,local serial port) Support SNMP V1/V2/V3 Support RMON V1/V2 Support LLDP device discovery Support NTP time synchronization Support DNS Client Support CPU Monitoring, memory monitoring Support System log, classification warning Support Ping,Tracert Detection, cable detection Support Apollo cloud platform one-stop management and maintenance

Networking application: