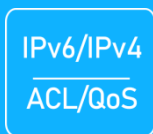




24-Port 10/100/1000Mbps Industrial Managed PoE Switch with 4-10G SFP+ Uplink



IES7521-24PGE4TF-AC

Key Features:

Ports: Provide 24*10/100/1000Mbps PoE ports with 4*10Gbps SFP+

PoE Standard: IEEE802.3af/at Power over Ethernet (PoE) Compliant

Self-adaption: RJ45 port supports 10/100/1000Mbps Auto MDI/MDIX

Wide Application: Designed for Railway, traffic etc some Industrial environment

Surge protection: Protect the device from lightning surges and others electrical hazards

Managed: Support remote web managed, VLAN and storm control and IPV6 management etc.

Layer3 Features, Static route, RIP, OSPF etc.

Working Temperature: -40 to 85 degrees operating temperature

Considerate Design: IP40 Industrial design

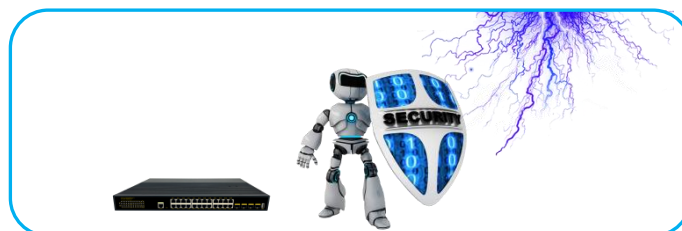
Environmentally Hardened Design

With the **IP40** metal industrial case which provides a high level of immunity against electromagnetic interference and heavy electrical surges, Being able to operate under the temperature range from **-40 to 85 degrees C**, the IES7521-24PGE4TF-AC can be placed in almost any difficult environment.



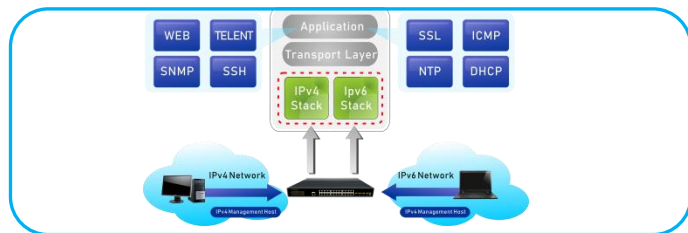
Cost-effective IPv6 Managed Gigabit PoE Switch Solution

With layer 2+ managed Gigabit PoE Switch, It provides IPv6/IPv4 management and built-in L2/L4 Gigabit Switching engine, and supports high-speed transmission of surveillance images and videos.



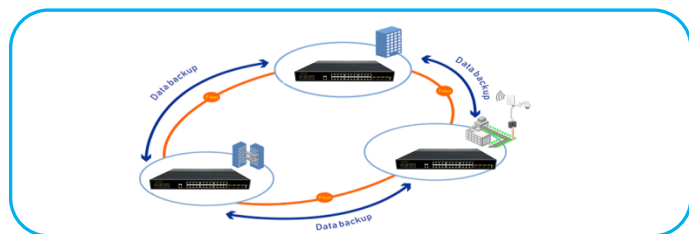
Comprehensive reliability mechanisms(ERPS)

Besides STP, RSTP, and MSTP, the IES7521 Series Managed PoE Switch supports enhanced Ethernet reliability technologies such as Ethernet Ring Protection Switching (ERPS), also referred to as G.8032. ERPS supports various services and allows flexible networking, helping customers build a network with lower OPEX and CAPEX.



Surge Protection Design

provides contact discharge of $\pm 8\text{KV}$ DC and air discharge of $\pm 15\text{KV}$ DC for Ethernet ESD protection. It also supports $\pm 6\text{KV}$ surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.



IES7521-24PGE4TF-AC

24-Port 10/100/1000Mbps Industrial Managed PoE Switch with 4-10G SFP+

Technical Datasheet

Model	SP7500-24GP4TF-L3M	
Hardware Specifications		
Connector	24*10/100/1000BASE-T RJ45 auto MDI/MDIX ports	
	4*1/10G Base-X SFP+ Slots Uplink	
	1 Console port, 1 USB Port	
Uplink port	4 10G Base-X SFP+ Slots	
LED Display	Power Indicator: PWR(green).	
	Network Indicator: Link(yellow)	
	POE: Orange	
	SFP: Green	
Thermal Fan	Fanless Design	
Network Standard	IIEEE 802.3u 100BASE-TX/100BASE-FX	
	IEEE 802.3z 1000BASE-SX/LX	
	IEEE 802.3ab 1000BASE-T	
	IEEE 802.3ae 10Gb/s Ethernet	
	IEEE 802.3x flow control and back pressure	
	IEEE802.3az EEE	
Switch Architecture	Store and Forward	
Transmission model	IEEE802.3X full-duplex and Backpressure half-duplex	
Switch Performance	Backplane bandwidth	256Gbps
	Packet forwarding rate	132.61Mpps
	MAC address	16k
Power requirement	AC100-240V 50/60Hz	
ESD Protection	6KV ESD	
Dimension	440mm x 290mm x 44.5mm(17.32in x 11.42in x 1.75in)	
Weight	7kg	
Environment	Operating temperature: -20℃~55℃ , operating humidity: 5%~95%	
	Storage temperature: -40℃~75℃ , storage humidity: 5%~95%	
Safety	FCC Part15 Class A,CE,RoHs	
Power over Ethernet (PoE) Specifications		
PoE Standard	IEEE 802.3af Power over Ethernet/PSE	
	IEEE 802.3at Power over Ethernet Plus/PSE	
PoE Supply Type	1/2(+), 3/6(-) End-span	
PoE Power Output	Per Port 52V DC, 300mA. max. 15.4 watts (IEEE 802.3af)	
	Per Port 52V DC, 600mA. max. 30 watts (IEEE 802.3at)	
PoE Power budget	500W	

Layer 3 Functions

Port Mirroring TX / RX / both Many-to-1 monitor

Vlan
802.1Q tagged-based VLAN
Up to 256 VLAN groups, out of 4094 VLAN IDs
802.1ad Q-in-Q tunneling
Voice VLAN; Protocol VLAN; Private VLAN (Protected port), GVRP

Link Aggregation
IEEE 802.3ad LACP and static trunk
Supports 8 groups of 8-port trunk

Spanning Tree Protocol
STP, IEEE 802.1D Spanning Tree Protocol
RSTP, IEEE 802.1w Rapid Spanning Tree Protocol
MSTP, IEEE 802.1s Multiple Spanning Tree Protocol

IGMP Snooping IGMP (v2/v3) snooping; IGMP querier; Up to 256 multicast groups

MLD Snooping MLD (v1/v2) snooping, up to 256 multicast groups

Access Control List IPv4/IPv6 IP-based ACL / MAC-based ACL

PoE Management
Open or close port
Standard POE scheduling management Power and current display
Automatic restarting function of equipment dead machine Timing
Support IP bindings restarting

Layer 3 Features
IPv4/IPv6 VRRP, the maximum group is 255
IPv4/IPv6 static route/default route supports up to 128 entries
IPv4 dynamic routing, RIPv1/v2, OSPFv2, 4000 routing entries
IPv6 dynamic routing OSPFv3, RIPv6, IPv6 management, 1000 routing entries
L3 network management function, IPv4/IPv6 dual-stack management
Layer 3 routing and forwarding, support communication between different network segments and different VLANs

QoS
8 mapping ID to 8 level priority queues
--- Port number
--- 802.1p priority
--- 802.1Q VLAN tag
--- DSCP field in IP packet
Traffic classification based, strict priority and WRR

Security
IEEE 802.1X port-based authentication
Built-in RADIUS client to co-operate with RADIUS server
RADIUS / TACACS+ user access authentication; IP-MAC port binding; MAC filtering;
Static MAC address; DHCP Snooping and DHCP Option82; STP BPDU guard,
BPDU filtering and BPDU forwarding; DoS attack prevention; ARP inspection

Management Function

Basic Management Interfaces
Web browser / Telnet / SNMP v1, v2c, V3
Firmware upgrade by HTTP / TFTP protocol through Ethernet network
Remote / Local Syslog, System log, LLDP protocol, SNTP

Secure Management Interfaces
SSH, SSL, SNMP

SNMP MIBs
RFC 1213 MIB-II
RFC 1215 Generic Traps
RFC 1493 Bridge MIB
RFC 2674 Bridge MIB Extensions
RFC 2819 RMON (1, 2, 3, 9)
RFC 2863 Interface Group MIB
RFC 3635 Ethernet-like MIB

IES7521-24PGE4TF-AC

24-Port 10/100/1000Mbps Industrial Managed PoE Switch with 4-10G SFP+

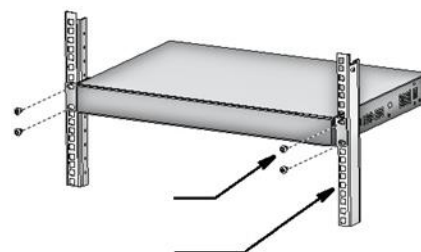
Installation Models

Power Terminal

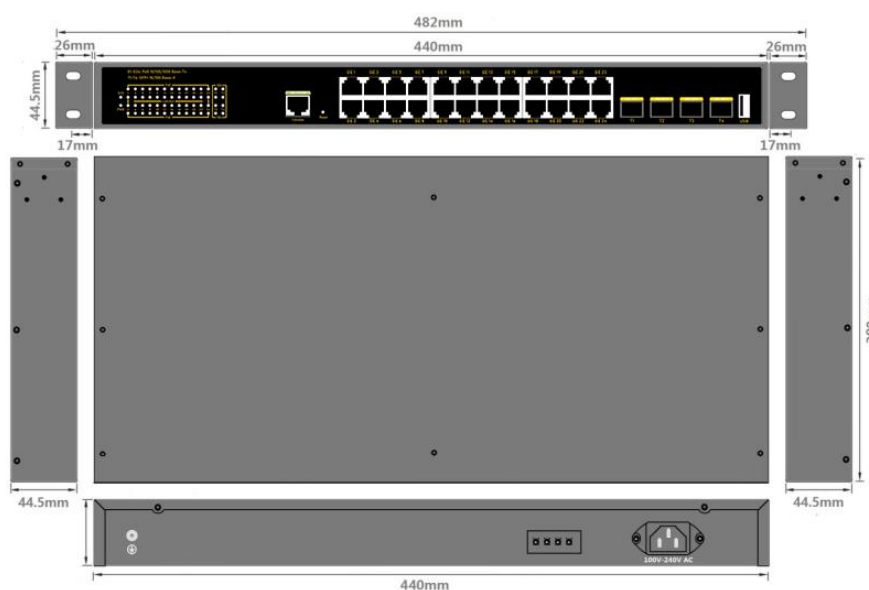


- ◆ 4-pin 3.81mm-spacing plug-in terminal
- ◆ 100V-260V AC wide voltage input
- ◆ P1&P2 dual power input
- ◆ Reverse protection

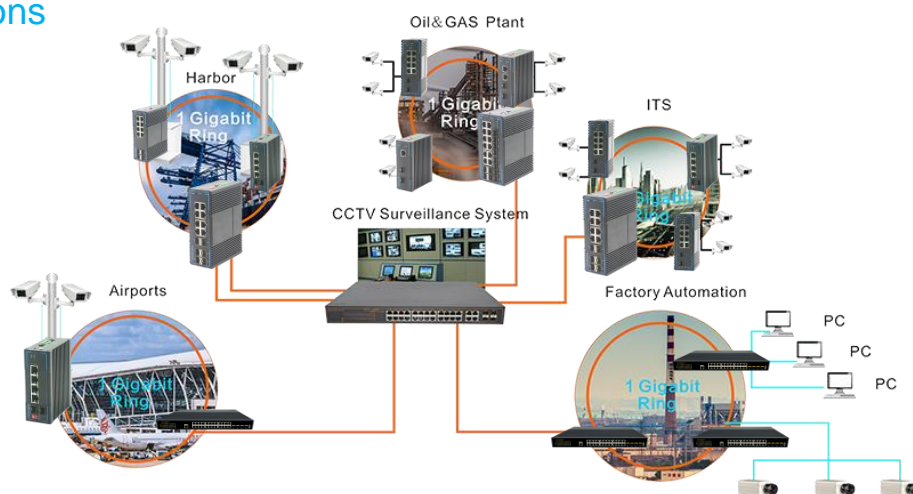
Rack Mounting



Structure Diagrams



Applications



Ordering Information

IES7521-24PGE4TF-AC

24 Ports 10/100/1000Mbps Industrial Managed PoE switch With 4 Ports 1G/10G SFP+, Rack mount Installation, IEEE802.3af/at