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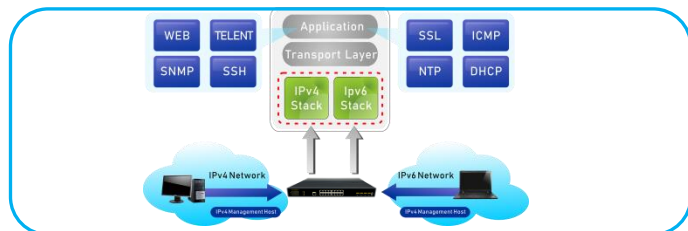
BCZW

EXCLUSIVE 5YEAR WARRANTY

IES7521-16PGE4TF-AC

RING

IPv6/IPv4 ACL/QoS
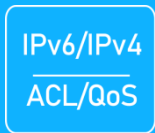
802.3at PoE+ 802.3af

Key Features:

Ports: Provide 16*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 lighting 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 IES7521-16PGE4TF-DC can be placed in almost any difficult environment.

Surge Protection Design

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

Working Temperature
-40°C 85°C
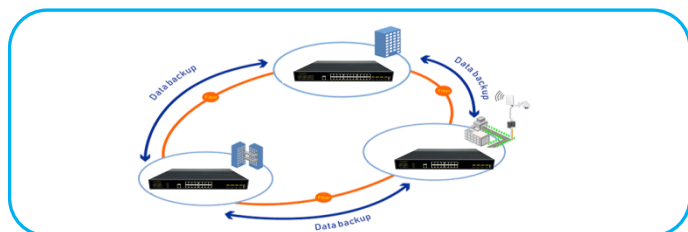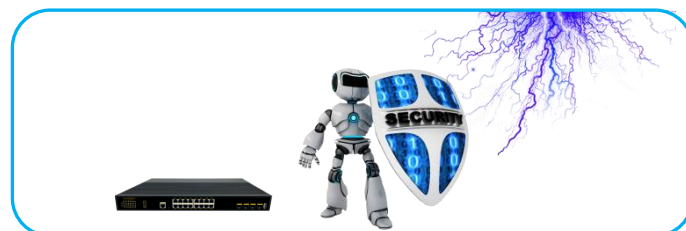Wide temperature design
work well in different harsh environment

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.

Technical Datasheet

Model	SP7500-16PGE4TF-L3M	
Hardware Specifications		
Connector	16*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	112.32Mpps
	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	5kg	
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	400W

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, RIPng, 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

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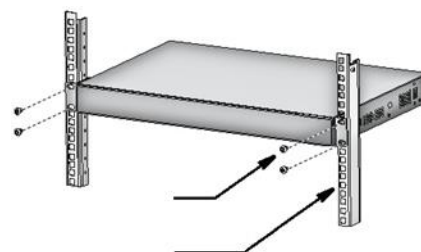## 16-Port 10/100/1000Mbps Industrial Managed PoE Switch with 4-10G SFP+

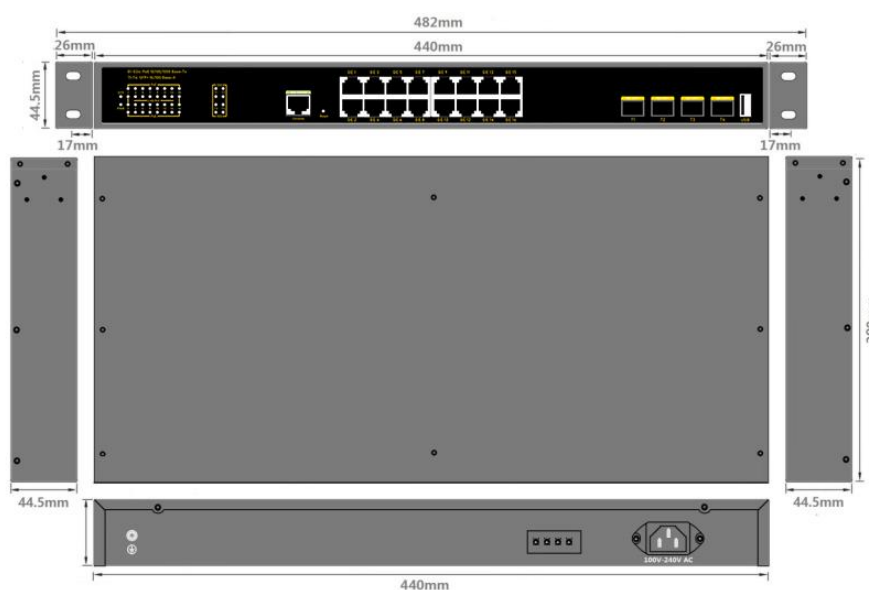## Installation Models

Power Terminal

- P1-
- P1+
- P2-
- P2+

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

Rack Mounting
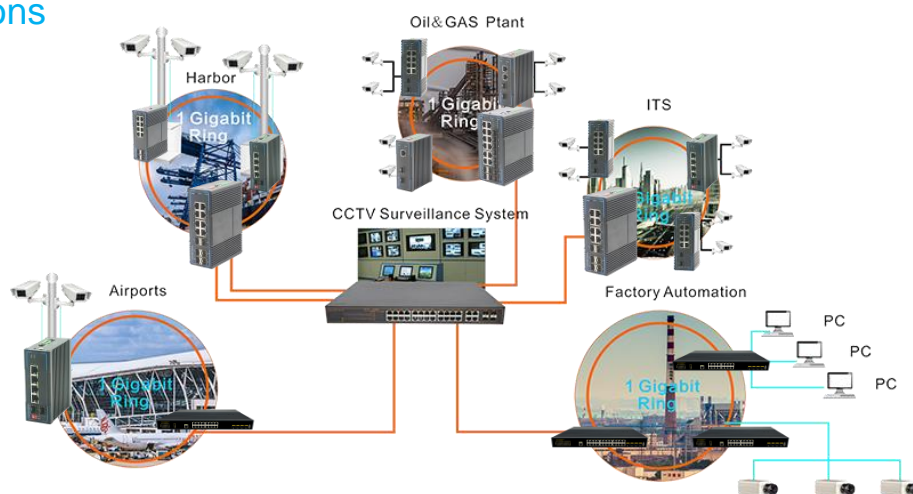

Structure Diagrams

Applications

Ordering Information	
IES7521-16PGE4TF-AC	16 Ports 10/100/1000Mbps Industrial Managed PoE switch With 4 Ports 1G/10G SFP+,Rack mount Installation, IEEE802.3af/at