

Switch with 4 Gigabit RJ45 and
4-10G SFP+ Uplink

Layer 3

10G
SFP+

802.3at
PoE+
802.3af

ITT-ISWP-L3-12G4S+

Key Features:

Ports: Provide 8*10/100/1000Mbps PoE ports with 4 ports 10/100/1000M RJ45+ 4*10Gbps SFP+, 1 Console Port

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

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

Layer 3 Managed: Supports IPV4/IPV6 management, static route, RIP, OSPF, security protection mechanisms, complete ACL/QoS policies, and rich VLAN functions. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS(<20ms) to improve link backup and network reliability

Industrial Installation: Din Rail mounting installation

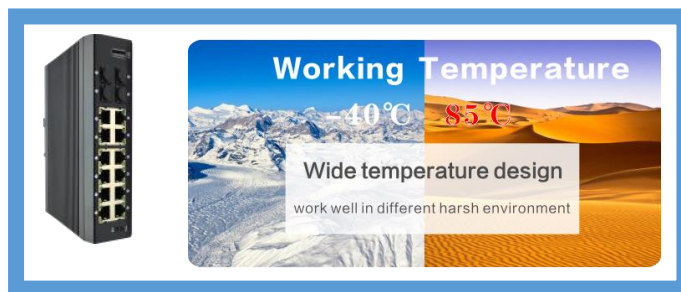
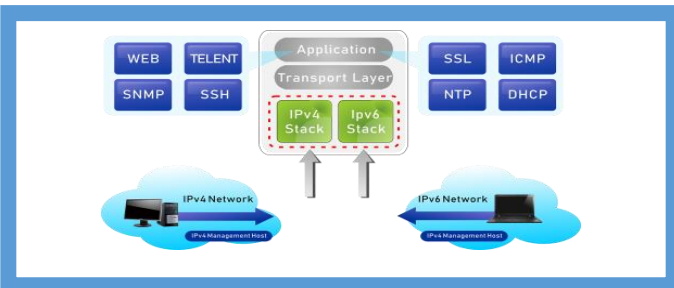
Wide Application: Designed for Railway, traffic etc some Industrial environment

Working Temperature: -40 to 85 degrees operating temperature

Considerate Design: IP40 Industrial design with dual power input

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 ITT-ISWP-L3-12G4S+DC can be placed in almost any difficult environment.

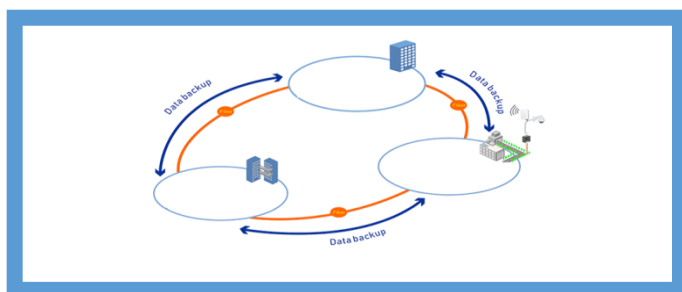


Cost-effective IPv6 Managed Gigabit PoE Switch Solution

With layer 3 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.

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.



Comprehensive reliability mechanisms(ERPS)

Besides STP, RSTP, and MSTP, the ITT-ISWP-L3-12G4S+DC 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	ITT-ISWP-L3-12G4S+	
Hardware Specifications		
Connector	12* 10/100/1000BASE-T RJ45 auto MDI/MDIX ports	
	4* 10G Base-X SFP+ Slots 1 Console port	
PoE Port	8* 10/100/1000Mbps POE PSE port	
LED Display	Power Indicator: PWR(green).Network Indicator: Link(yellow)	
	PoE Working Indicator: PoE(green)	
Thermal Fan	Fanless Design	
Installation	Din Rail	
Switch Architecture	Store and Forward	
Transmission model	IEEE802.3X full-duplex and Backpressure half-duplex	
Switch Performance	Backplane bandwidth	128Gbps

	Packet forwarding rate	72Mpps
	MAC address	16k
Power requirement	DC 48V~54V	
ESD Protection	6KV ESD	
Dimension(WxDxH)	50mm x145mm x 170mm(1.97in x 5.71in x 6.69in)	
Weight	1.3kg	
Power over Ethernet (PoE) Specifications		

Network standard	IEEE802.3i 10 BASE-T
	IEEE802.3u 100 BASE-TX
	IEEE802.3ab 1000BASE-T
	IEEE802.3ae 10ASE-X
	IEEE802.3x Flow Control
	IEEE802.3af Power over Ethernet
	IEEE802.3at Power over Ethernet
PoE Standard	IEEE802.3az EEE
	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	120/240W optional

Layer 3 Functions	
Network Management Type	Layer 3
Layer 3 Features	Support ARP protocol, maximum 1024 pcs
	Support static route/default route, maximum 128 pcs
	Support L3 network management function,
	Support IPV4/IPV6 dual stack management
	Support L3 routing at full wire-speed forwarding,
Port Mirroring	Support communication between different network segments and different VLANs
	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

Industrial Ring	G.8032 (ERPS), Recovery time less than 20ms
	250 Ring at most, Max 1024 devices per ring

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

MLD Snooping	MLD (v1/v2) snooping, up to 256 multicast groups
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Access Control List	IPv4/IPv6 IP-based ACL / MAC-based ACL
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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

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; IP source guard

Management Function

Basic Management Interfaces	Web browser / Telnet / SNMP v1, v2c, V3
	Firmware upgrade by HTTP / TFTP protocol through Ethernet network
Secure Management Interfaces	Remote / Local Syslog, System log, LLDP protocol, SNMP
	SSH, SSL, SNMP
SNMP MIBs	RFC 1213 MIB-II; RFC 1215 Generic Traps; RFC 1493 Bridge MIB
	RFC 2674 Bridge MIB Extensions; RFC 2737 Entity MIB (Version 2)
	RFC 2819 RMON (1, 2, 3, 9); RFC 2863 Interface Group MIB
	RFC 3635 Ethernet-like MIB

Environment

Safety

FCC Part15 Class A,CE,RoHs

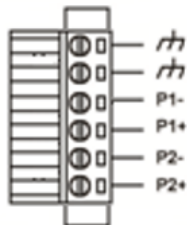
Environment specification

Operating temperature: -40℃~85℃, operating humidity: 5%~95%

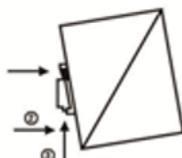
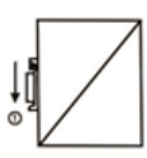
Storage temperature: -40℃~85℃, storage humidity: 5%~95%

Installation Models

Power Terminal

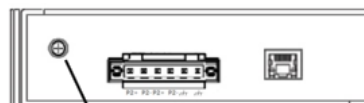


- ◆ 6pin 3.81mm-spacing plug-in terminal
- ◆ 48V-54VDC wide voltage input
- ◆ P1&P2 dual power input
- ◆ Reverse protection



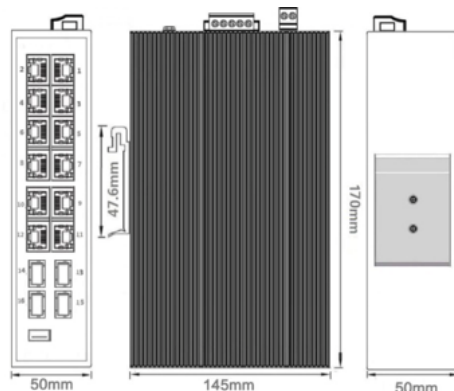
Din-Rail

Earth Protection



Ground screw

Mechanical Drawing



Applications



Ordering Information

ITT-ISWP-L3-12G4S+	8Ports 10/100/1000Mbps Industrial Layer 3 Managed PoE switch With 4 ports gigabit RJ45 and 4-1G/10G SFP+, Din rail, IEEE802.3af/at
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