

IS-DX612P Series

12-port 10G DIN-Rail Managed Layer 2 Industrial PoE Switch



The IS-DX612P Series are 10G managed 12-port Ethernet switch with up to 8 PoE IEEE 802.3af/at PoE ports featuring a fan-less/wide operating temperature (-40~75 °C) design supporting up to 8G TX ports and 4x 10G SFP's. These models are perfect for upgrading an existing network to a full Gigabit speed Infrastructure or access to core layer networks; a full Gigabit network plus 10G uplinks provides higher throughput than legacy Fast Ethernet network. The switches can provide power and data directly through a single Ethernet cable, which is ideal for factory production line or embedded into machine system. The IS-DX612P Series managed PoE switches are especially good for Building automation, CCTV, ITS and security/safety related applications.



Key features

- ▶ 8 Gigabit RJ45 Copper ports plus 4 10G Based SFP+ ports
- ▶ Support up to 8 PoE port, IEEE 802.3af/at PoE, 15.4/30 Watts output, Full Load
- ▶ Support 16K Jumbo frames
- ▶ Layer 2 Line-Speed Switching Fabric, non-blocking
- ▶ Network redundancy LACP, Spanning Tree Protocol, STP, RSTP, MSTP, ERPS
- ▶ IEEE 802.1Q Tag-based VLAN, IEEE 802.1ad Double Tagging (QinQ)
- ▶ IEEE 802.1X Port-based access control, RADIUS,
- ▶ Redundant Power Input (48~57 VDC) & Reverse power protection
- ▶ SNMP v1/v2c/v3, Trap / Inform, RMON
- ▶ DIN-Rail Mount, Wall Mount
- ▶ -40~75°C operating temperature
- ▶ IP 30 Protection
- ▶ 2KV surge immunity on RJ45 Copper port
- ▶ 1.5KV Hipot
- ▶ Rugged Fanless Design
- ▶ Fault Alarm Notification (Power, Ports)
- ▶ Support IPV4/V6

Specification

Ethernet

Operating Mode	Store and Forward, L2 wire-speed/non-blocking switching engine
MAC addresses	16K
Packet Buffer	12 Mbits
Jumbo frame	16K
Switching Fabric / Back Plane	96Gbps

RJ45 Copper ports

Speed	10/100/1000 Mbps
MDI/MDIX Auto-crossover	Support straight or cross wired cables
Auto-negotiation/Duplex	10/100/1000 Mbps speed auto-negotiation; Full & Half Duplex
Ethernet Port Protection	1.5KV VRMS 1minute (Hipot), 2KV surge immunity on RJ45 Copper ports
PoE	IEEE 802.3af/at (15.4/30 Watt), PoE/PoE+

Fiber Ports

Port Types supported	10G Base SFP+ Slot
Fiber port connector	LC/RJ45 connector for fiber ports
Optimal fiber cable	Typical 50 or 62.5/125 μm for multimode (mm) Typical 8 or 9/125 μm for single mode (sm)

Protocols & Standards

IEEE 802.3 10BaseT, IEEE 802.3u 100BaseTX, IEEE 802.3ab 1000BaseT, IEEE 802.3ae 10GBase over Fiber, IEEE 802.3x Flow Control, IEEE 802.3ad LACP, IEEE 802.3af Power over Ethernet, IEEE 802.3at PoE+, IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid STP, IEEE 802.1s Multiple STP, ITU-T G.8032 / Y.1344 ERPS, IEEE 802.1Q VLAN Tagging, IEEE 802.1ad Stacked VLANs, IEEE 802.1p Class of Service, IEEE 802.1X Network Authentication, IEEE 802.1AB LLDP

Network Redundancy

Spanning Tree Protocol	RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP
Port Trunk / LACP	Static Trunk or LACP (Link Aggregation Control Protocol)

Bridge, VLANs, Protocols

Flow Control	IEEE 802.3x (Full Duplex) and Back-Pressure (Half Duplex)
VLAN Table Size	4094
VLAN Types	IEEE 802.1Q tag-based VLAN, IEEE 802.1ad Double Tagging (QinQ)
Multicast protocols	IGMP Snooping v1/v2/v3, IGMP Querier
LLDP	IEEE 802.1AB LLDP

Traffic management & QoS

Priority	IEEE 802.1p QoS
Number of queues per port	8
Scheduling schemes	CoS, DSCP, WRR/SPQ Queuing, Storm Protection

Security

Port Security	802.1X, RADIUS, TACACS+, SSL, SSH
Storm Protection	Yes

Management

User Management Interfaces	IPv4, IPv6, Web, Telnet, Serial Console, CLI, uPnP
	Web-based Management
	SNMP v1, v2c, v3, RMON, Trap / Inform, Telnet
Management Security	HTTPs, SSH, Access Management
	RADIUS Client for Management
Upgrade & Restore	TFTP for Configuration Import / Export, TFTP for firmware update
	USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog
Diagnostic	RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP
DHCP	DHCP Server/Client, Relay Option 82, TFTP
NTP	YES
System Status	Device info/status; Ethernet port status

Power

Power Input	Redundant Power Input, Removable Terminal Block
Input Voltage Range	48-57 VDC
Reverse power protection	YES
Power Consumption	17 Watt

Indicators

Power status indication	Power Input status
Ethernet port indication	Link & speed

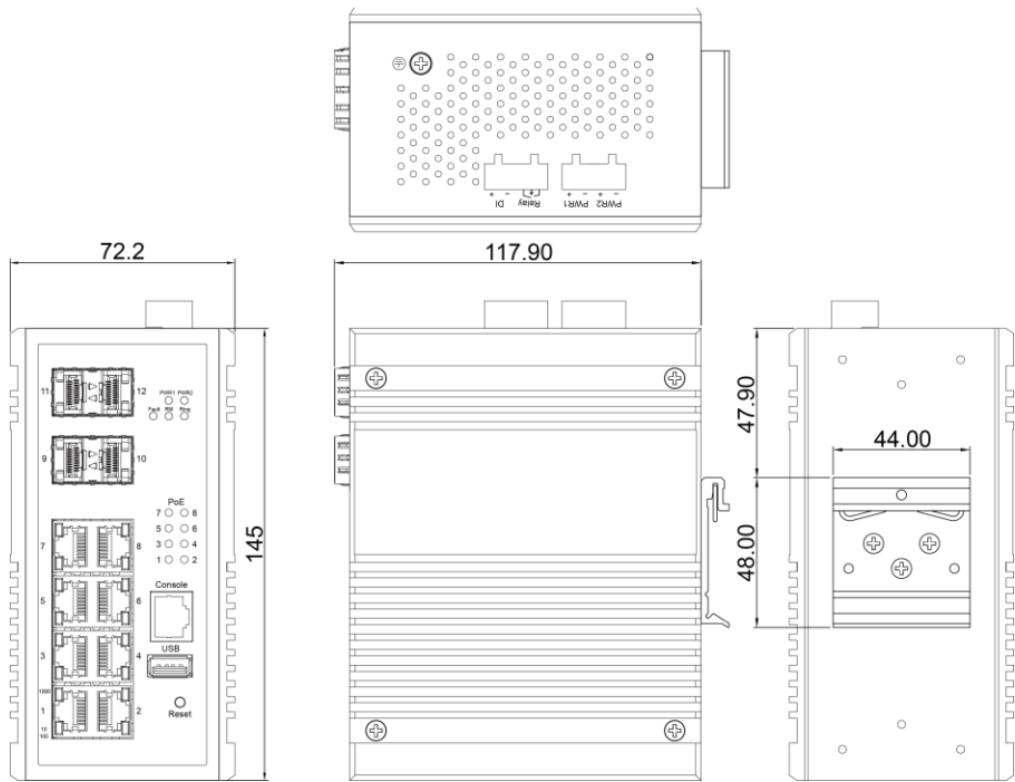
Environmental and Compliances

Operating Temperature	-40~75°C (Cold startup at -40°C)
Storage Temperature	-40~85°C
Humidity	5~95% (Non-Condensing)
Vibration, shock, free fall	IEC-60068-2-6, -27, -32
Certification Compliance	CE, FCC
Electrical safety	CE
EMC	FCC Part 15, CISPR 22 (EN55022) Class A IEC-61000-4-2, -3, -4, -5, -6, -8 (Level 3), IEC-61000-6-2, -4
RoHS & WEEE	RoHS (Pb free) and WEEE Compliant
MTBF	>100,000 hours

Mechanical

Protection	IP30
Dimension	72x145x118 mm (WxHxD)
Weight	0.88 kg
Installation	DIN-Rail Mount, Wall mount
Digital Inputs	1x isolated input from the electronics. +13 to +30V for state "1", -30 to +3V for state "0", Max. input current: 8mA
Alarm Contact	1x relay output with current carrying capacity of 1A @ 24 VDC

Dimension Diagram



Ordering Information

Available Models	Description	10/100/1000Mb TX	1G/10G FX
IS-DX612P-4XG-8	Industrial 12 port Gigabit Layer 2 Managed PoE Switch, 4x 10G SFP+ Slot, 8 PoE, -40~75°C	8 (8 PoE)	4

Accessories

- 1. Gigabit SFP Modules
- 2. 10 Gigabit SFP+ Modules
- 3. IS-RK2U 19" rack mounting kit
- 4. IS-RK4U 19" rack mounting kit

Package Checklist

- IS-DX612P Switch
- Quick Installation Guide (Printed)
- RS232 Console Cable
- RJ45 / SFP Cap / Wall Mount kit DIN-Rail kit