

IS-DX920 Series

20 Port Industrial Managed L3 Switch with 10G Uplink



The IS-DX920 Series are Layer 3 full Gigabit Ethernet Switches with 4x 10G and 16x Gigabit Ethernet ports, 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 IS-DX920 Series reduces the response time for timing sensitive applications which may be mix of video, voice, and data stream in the traffic flow. With the powerful S/W and H/W features, the IS-DX920 Series prioritize, partition and optimize user's network while provide reliable and quality services. The IS-DX920 Series switches are suitable for access level network connection.



Key features

- ▶ 16x Gigabit Ethernet ports (16x TX or 8x TX + 8x FX)
- ▶ 4x 1/10 Gigabit Ethernet SFP+ Slot
- ▶ Built for harsh environments and wide temperature range application
- ▶ RSTP, MSTP, ERPS, LACP for Network Redundancy
- ▶ QoS CoS/DSCP to increase determinism
- ▶ Supports IGMP Snooping v1/v2/v3, up to 512 groups
- ▶ DHCP Relay Option 82 for policies IP address assignment
- ▶ SNMP v1/v2c/v3 for network management
- ▶ Supports Storm Protection
- ▶ USB storage for configuration-free replacement
- ▶ Supports industrial automation protocols Ethernet/IP and Modbus TCP

Specification

Technology

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/802.1AX LACP 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
Processing Type	Store and Forward

Switch Properties

Switch Fabric	112Gbps
Priority Queues	8 Queues
Jumbo Frame	9216bytes
MAC Table Size	16K
Packet Buffer	12Mbits
VLAN Table Size	4094

IGMP Group	512
ACL Group	512
VLAN IP Entries	64
Routing Entries (IPv4/IPv6)	512/256 host, 64/64 LPM

Software Feature

Network Redundancy	RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP
Security	802.1X, RADIUS, TACACS+, SSL, SSH
Management	IPv4, IPv6, Web, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP
Diagnostics	RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP
Configuration	DHCP Server/Client, Relay Option 82, TFTP, USB
Filter	802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning
Time Sync.	NTP, IEEE1588v2 OC (Software Timestamp), BC (Software Timestamp), TC (Hardware Timestamp)
QoS	CoS, DSCP, WRR/SPQ Queuing, Storm Protection
Industrial Profiles	Ethernet/IP, Modbus TCP
L3 Switching	Static Routing, RIP v1/v2, OSPF v2, VRRP v2

Interface

RJ45 Port	10/100/1000T(x), auto negotiation speed duplex mode, auto MDI/MDI-X
Fiber Port	4x 1/10 Gigabit Ethernet SFP+ Slot, (IS-DX910-8F)4x 1000F(x) SFP Slot + 4x 100/1000F(x) SFP Slot
LED Indicators	Per unit: PWR1, PWR2, Fault, Ring Master, Ring State Ports: Link/Active with highest speed(Green), low speed(Amber)
Alarm Contact	1x relay output with current carrying capacity of 1A @ 24 VDC
Digital Inputs	1x isolated input from the electronics. +13 to +30V for state "1" -30 to +3V for state "0" Max. input current: 8mA
Button	Multiple functions reset button
Serial Console	1x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1
Storage	1x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog

Power Requirements

Operation Voltage	12-48VDC, redundant dual inputs
Connection	1x removable 4-contact terminal block
Power Consumption	0.63A@24VDC
Protection	Overload Current Protected, Reverse Polarity Protected

Mechanical Construction

Enclosure	Aluminum
Protection Class	IP30
Dimensions	90.8x145x117.7 mm (WxHxD)
Weight	1.38 kg(IS-DX920-8F-4XG), 0.97kg(IS-DX920-4XG)
Mounting	DIN-Rail Mounting, Optional Wall Mounting Kits

Environmental Limits

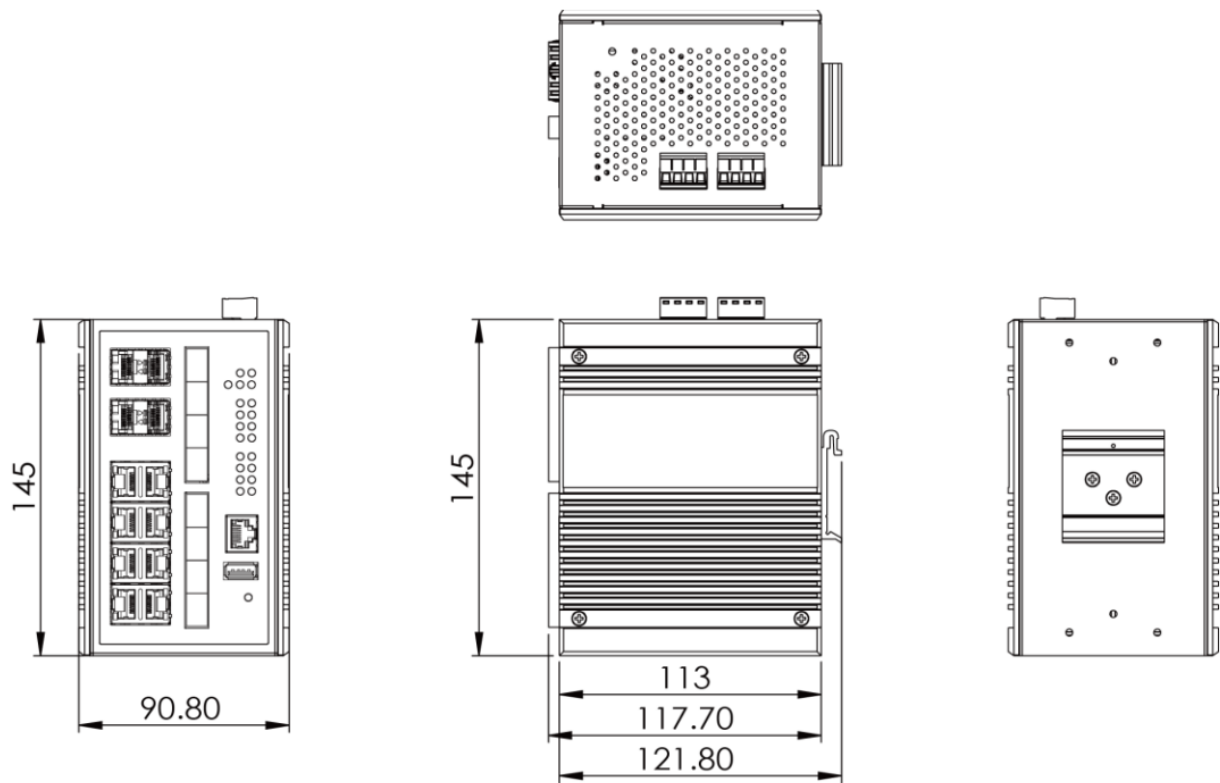
Operating Temperature	Extended: -40°C ~ 75°C (-40°F ~ 167°F) For 10G SFP+: -40 ~ 60°C (32°F ~ 140°F)
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Ambient Relative Humidity	5 to 95%, (Non-Condensing)

Regulatory Approvals

EMI	CE EN 55032 Class A
EMS	IEC61000-4-2 (ESD) IEC61000-4-3 (RS) IEC61000-4-4 (EFT) IEC61000-4-5 (Surge) IEC61000-4-6 (CS) IEC61000-4-8 (Magnetic Field)
Free Fall	IEC60068-2-32
Shock	IEC60068-2-27
Vibration	IEC60068-2-6

Green	RoHS Compliant
Certifications	IEC 61000-6-2 IEC 61000-6-4 EN 50121-4
MTBF	>100,000 hours
Warranty	5 Years

Dimension Diagram



Ordering Information

Available Models	Description
IS-DX920-8F-4XG	8+12 Port Industrial Managed L3 Switch with 10G Uplink - 8x 10/100/1000T(x) + 8x 100/1000F(x) SFP Slot + 4x 1/10 Gigabit Ethernet SFP+ Slot - Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F) For 10G SFP+: -40 ~ 60°C (-40°F ~ 140°F)
IS-DX920-4XG	16+4 Port Industrial Managed L3 Switch with 10G Uplink - 16x 10/100/1000T(x) + 4x 1/10 Gigabit Ethernet SFP+ Slot - Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F) For 10G SFP+: -40 ~ 60°C (-40°F ~ 140°F)

Accessories

- 1. Gigabit SFP Modules
- 2. 10 Gigabit SFP+ Modules

Package Checklist

- IS-DX920 Switch
- Quick Installation Guide (Printed)
- RS232 Console
- RJ45 / SFP Cap / DIN-Rail kit