

IS-DG912P-4F-8

8+4 Port Industrial Managed PoE+ Gigabit L3 Switch



Key features

- ▶ 8x Gigabit Ethernet ports with IEEE 802.3at PoE+
- ▶ 4x 1000F(x) 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
- ▶ Web browser, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP, SSH for network management
- ▶ Supports Storm Protection
- ▶ USB storage for configuration-free replacement
- ▶ Supports industrial automation protocols Ethernet/IP and Modbus TCP
- ▶ Supports PoE PD Alive Check Function for PoE Device Power Recycle



Specification

Technology

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3ab 1000BaseT IEEE 802.3z 1000BaseX IEEE 802.3x Flow Control IEEE 802.3az Energy-Efficient Ethernet IEEE 802.3af Power over Ethernet IEEE 802.3at PoE+ 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 IEEE 1588 PTP
Processing Type	Store and Forward

Switch Properties

Switch Fabric	24Gbps	Priority Queues	8 Queues
Jumbo Frame	9216bytes	ACL Group	512
MAC Table Size	16K	VLAN IP Entries	64
VLAN Table Size	4094	Routing Entries (IPv4/IPv6)	512/256 host, 64/64 LPM
IGMP Group	512	OSPF v3 IPv6 host	256 routes
Packet Buffer	12Mbits		

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, DDM
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
PoE	Powering Status, PoE Monitoring, Scheduling, PD Alive Check, PoE Priority
Industrial Profiles	Ethernet/IP, Modbus TCP, Profinet
L3 Switching	Static Routing, RIP v1/v2, OSPF v2, OSPF v3, VRRP v2

Interface

RJ45 Port	8x 10/100/1000T(x) with PoE+, auto negotiation speed duplex mode, auto MDI/MDI - X
Fiber Port	4x 1000F(x) SFP Slot
PoE Pin Out	V+, V+, V-, V-, for pin 1, 2, 3, 6, Endspan, MDI Mode A
LED Indicators	Per unit: PWR1, PWR2, Fault, Ring Master, Ring State Ports: Link/Active with highest speed(Green), low speed(Amber) PoE: Output Power
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	48-57VDC, redundant dual inputs, >50VDC for PoE+ output recommended
Connection	1x removable 4-contact terminal block
Power Consumption	0.35A@48VDC without PDs' consumption
PoE Power Budget	Max. 240 W for total PD consumption, Max. 30 W per PoE port
Protection	Overload Current Protected, Reverse

Mechanical Construction

Enclosure	Aluminum
Protection Class	IP30
Dimensions	72x145x118 mm (WxHxD)
Weight	0.9 kg
Mounting	DIN-Rail Mounting, Optional Wall Mounting Kits

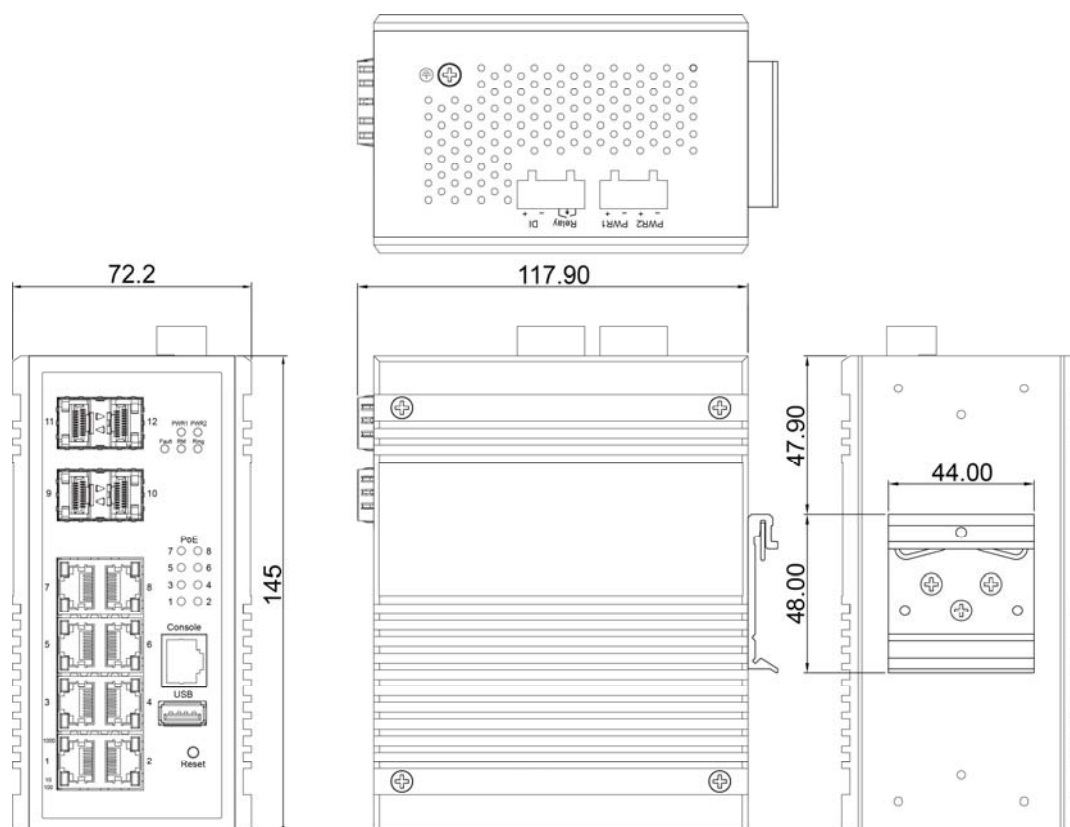
Environmental Limits

Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°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	EN 50121-4
MTBF	>100,000 hours
Warranty	5 Years

Dimensions (unit = mm)



Ordering Information

Available Models	Description
IS-DG912P-4F-8	8+4 Port Industrial Managed PoE+ Gigabit L3 Switch - 8x 10/100/1000T(x) with 30W PSE + 4x 1000F(x) SFP Slot - Operating Temperature: -40°C ~ 75°C (-40°F ~ 167°F)

Accessories

1. Gigabit SFP Modules

Package Checklist

- IS-DG912P Switch
- RS232 Console Cable
- RJ45 Cap / SFP Cap / Din-Rail kit