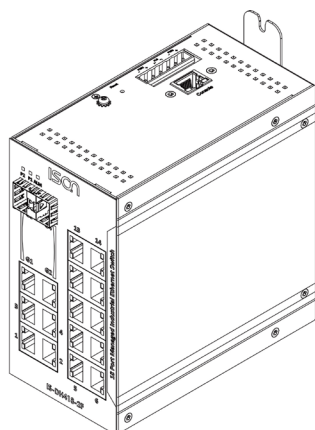# IS-DH418 Series

18-port Din-Rail Ethernet Managed switch Layer 2 Industrial Ethernet Switch

The IS-DH418 Series are web-managed 18-port Ethernet Switches that provide both copper and fiber connectivity according to field needs. These models reduce the response time for timing sensitive applications which may combine all video, voice, and data streams in the traffic flow. The Switches are especially good for those common application that doesn't required complicated software features. The IS-DH418 Series are suitable for all kinds of Industrial applications.
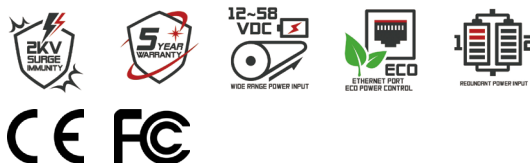
Key features

- ▶ 14 10/100Mb Copper ports, 2/0 1000Mb copper port, 2/4 1000Mb Based SFP ports
- ▶ Layer 2 Line-Speed Switching Fabric, non-blocking
- ▶ Network redundancy LACP, Spanning Tree Protocol, STP, RSTP
- ▶ Port-based VLAN, IEEE 802.1Q Tag-based VLAN
- ▶ Redundant Power Input (12~58 VDC) & Reverse power protection
- ▶ SNMP v1/v2c, Trap

- ▶ Din-Rail Mount, Wall Mount Installation
- ▶ -40~75ºC operating temperature
- ▶ IP 30 Protection
- ▶ 2KV surge immunity on RJ45 Copper port
- ▶ 1.5KV Hi-pot
- ▶ Rugged Fan-less Design
- ▶ Fault Alarm Notification (Power)

Specification

Ethernet

Operating Mode	Store and Forward, L2 wire-speed/non-blocking switching engine
MAC addresses	16K
Packet Buffer	4 Mbits
Switching Fabric / Back Plane	10.8 Gbps

RJ45 Copper ports

Speed	10/100 Mbps
MDI/MDIX Auto-crossover	Support straight or cross wired cables
Auto-negotiation/Duplex	10/100 Mbps speed auto-negotiation; Full & Half Duplex
Ethernet Port Protection	1.5KV VRMS 1minute (Hi-pot), 2KV surge immunity on RJ45 Copper ports

Fiber Ports

Port Types supported	1000 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, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1D/w, IEEE 802.1Q/p, IEEE 802.1ab, IEEE 802.1X, IEEE 802.3ad LLDP, IPv4/IPv6, SNMP v1/v2c/, TFTP, ARP, RARP, Telnet, Syslog, Flow Control, Back Pressure, ICMP, UPD, TCP

Network Redundancy

Spanning Tree Protocol	IEEE 802.1D/1w/1S, STP/RSTP/MSTP
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)
Max VLANs	256
VLAN Types	Port-Based VLAN, IEEE 802.1Q tag-based VLAN
Multicast protocols	IGMP v1, v2, up to 255 multicast groups
	IGMP snooping, querying
LLDP	IEEE 802.1ab LLDP

Traffic management & QoS

Priority	IEEE 802.1p QoS
Number of queues per port	8
Scheduling schemes	SPQ, WRR

Security

Port Security	IP and MAC-based Access Control/Filter, Auth User / Privilege Level Control
Storm Control	Multicast / Broadcast / Flooding Storm Control / Port Access Control / Limiters

Management

User Management Interfaces	Web-based Management
	SNMP V1, V2c, Trap, Telnet (5 sessions)
Management Security	HTTPs, SSH, Access Management, Loop Protection
Upgrade & Restore	TFTP for Configuration Import / Export
	TFTP for Firmware Upgrade
Diagnostic	Syslog, Level Info / Warning / Error
	Port Mirror, Per VLAN mirroring, CPU Load Monitor, Traffic Counter
	ICMP Ping
DHCP	Client Mode, Server Mode, Relay Mode, Snooping
SNTP	YES
System Status	Device info/status; Ethernet port status
Green Ethernet	Port Power Savings

Power

Power Input	Redundant Power Input, Removable Terminal Block
Input Voltage Range	12-58 VDC
Reverse power protection	YES
Transient protection	> 15, 000 Watts peak
Power Consumption	12.5Watt

Indicators

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

Environmental and Compliances

Operating Temperature	-40~75ºC (Cold startup at -40ºC)
Storage Temperature	-40~85ºC
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 (Level 3)
RoHS & WEEE	RoHS (Pb free) and WEEE Compliant
MTBF	>220,000 hrs

Mechanical

Protection	IP30
Dimension	138x130x85mm (LxDxW)
Weight	950g
Installation	Din-Rail Mount, Wall mount
Relay Output	1A, 24V, Normal Close

Dimension Diagram

72.6

135.7

138
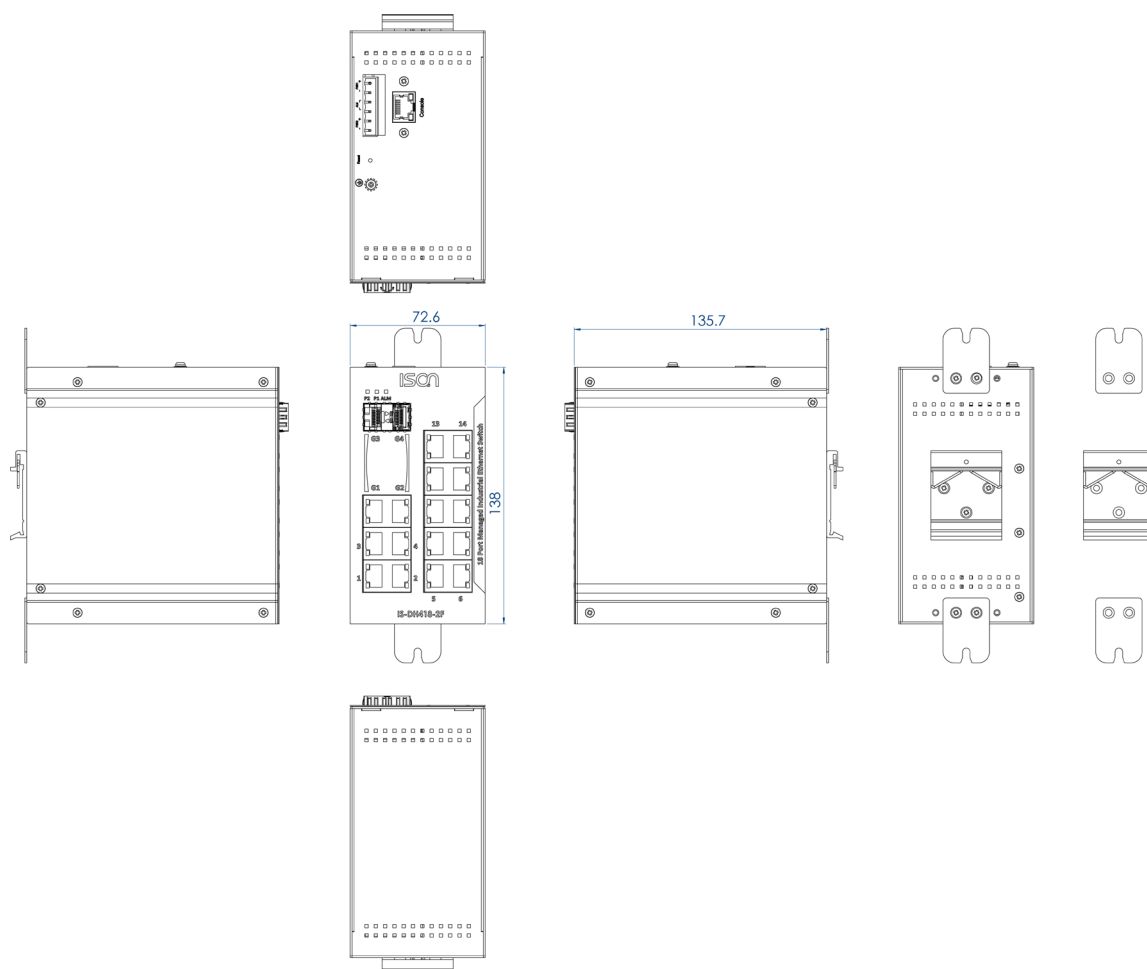
Ordering Information

Available Models	Description	10/100Mb TX	1000Mb TX	1000Mb FX
IS-DH418-2F	Industrial 18-port Ethernet Layer 2 Managed switch Ethernet Switch, 2 x 1000 Based SFP Slot, -40~75ºC	14	2	2
IS-DH418-4F	Industrial 18-port Ethernet Layer 2 Managed switch Ethernet Switch, -40~75ºC	14	0	4

Accessories

1. 1000 Mb SFP Modules
2. IS-RK2U rack mount kit
3. IS-RK4U rack mount kit

Package Checklist

• IS-DH418 Switch
• Quick Installation Guide (Printed)
• Documentation & Software CD
• RJ45 / SFP Cap / DIN-rail kit