

Ruggedized 8-Port Managed Gigabit Ethernet Switch with 2 Port Fiber SFP

DS408H

Industrial 8-port Managed Gigabit Ethernet Switch

DS408H, the 8-port Managed Gigabit industrial Ethernet switch, adopting a housing reminiscent of PLC designs, is ideal for Din-Rail installations in automation control cabinets with 2 port Gigabit Fiber communication.

Engineered to withstand harsh conditions, the protection level of DS408H aligns with heavy industrial communication standards, with support for both low voltage 11~ 27Vac and wide range 10~36V DC power inputs, while enduring wide temperatures from -40~75 °C.

Additionally, it incorporates most of L2 features, ERPS, RSTP, IGMP/Snooping, QoS, VLAN, SNMP and WEB UI management features to ensure optimal network performance. The switch forwarding mechanism, enables seamless communication for a wider range of industrial protocols for automation control systems.



Features & Benefits

High Speed Gigabit Switch with Fiber

- 6 ports 100/1000Mbps RJ-45
- 2 Ports SFP Socket, 100/ 1000Mbps WeB Setting

Management

- USB Type-C for Console Management
- Web User Interface Management
- SNMP V1/V2c/V3 , RMON, SNMP Trap
- DHCP Server/ Client, DHCP Relay Option 82

Various Network Traffic Control

- Port Ingress/ Egress Rate Control
- VLAN with port isolation
- IGMP Snooping, Broadcast Storm Filtering
- Traffic Priority Control, Ingress/ Egress Rate Control
- Port Aggregation – IEEE 802.3ad LACP
- Network Fault Redundancy – IEEE 802.1d STP, IEEE 802.1w RSTP, ERPS
- Port Access Security with MAC address

Long Packet Size Forwarding

- 64~1536 Bytes for double-tag VLAN
- 10Kbytes Jumbo Packet

Hardened System Design

- Wide operation temperature from -40 to 75°C
- Wide Range Redundant Power Inputs, DC 10~36V or AC 11~27V
- IP30 Ingress Protection

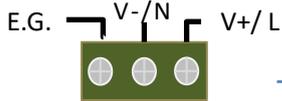
Vertical Application

- Process Automation – Real Time Machine Communication
- Low AC Voltage for Building Automation



Interfaces

3-Pin Removable Connector



E.G.: Earth Grounding Pin



Gigabit Ethernet Port 1 ~4

System, Port Status LEDs



Gigabit SFP Port 7,8
100/1000Mbps, DDM
Hot-Swappable

USB Type-C
Console

DIN Rail Clip

Reset Button

Gigabit Ethernet Port 1 ~4

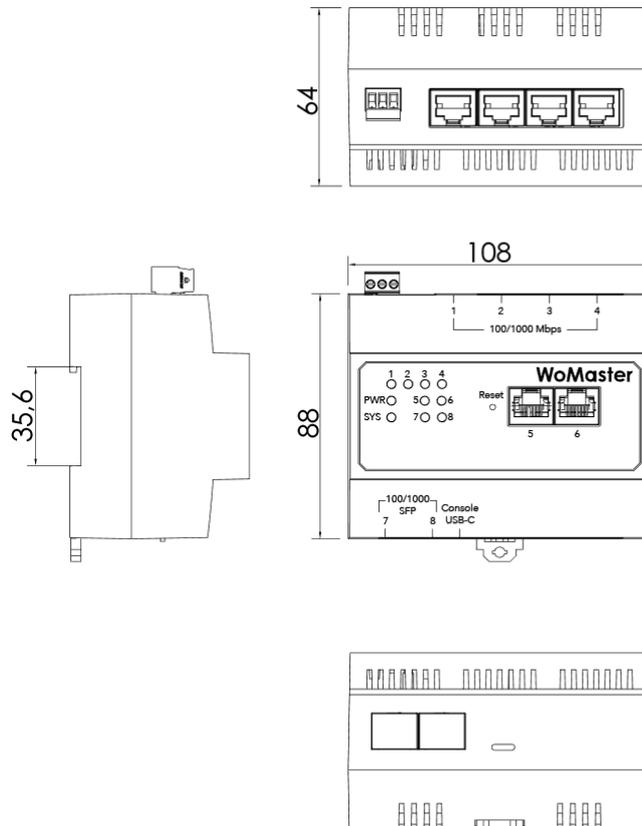
Gigabit Ethernet Port 5, 6

IP30, ABS Plastic Housing



Dimensions

Dimension (mm): 108 x 64 x 88 (W x H x D)



Technology	
Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE 802.3u 100Base-FX Fast Ethernet Fiber
	IEEE 802.3ab 1000Base-T Gigabit Ethernet copper
	IEEE 802.3z Gigabit Ethernet Fiber
	IEEE 802.3x Flow Control and back-pressure
	IEEE 802.1p Class of Service (CoS)
	IEEE 802.1Q Quality of Service
	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
	IEEE 802.1D-2004 Rapid Spanning Tree Protocol (RSTP)
	IEEE 802.1S Multiple Spanning Tree Protocol (MSTP)
	IEEE 801.1AX/802.3ad Link Aggregation Control Protocol (LACP)
	ITU-T G.8032 Ethernet ring protection switching (ERPS)
Interface	
Ethernet Port	6 x 10/100/1000Mbps RJ45, Auto Negotiation , Auto MDI/MDI-X 2 x SFP Socket for 100Mbps, 1000Mbps SFP Fiber Transceiver (Manual setting SFP type) Support SFP DDM function (Optical RX/TX power, Temperature)
Console Interface	USB Type-C connector, supports device-mode, Baud Rate 115200bps, N,8,1 ,
System LED	1 x Power: Green
Ethernet Port LED	RJ-45:Link (Green On) Port Link Up; Activity (Green Blinking): Packet forwarding
Power input	3-Pin Removable Terminal Connector with Polarity Auto Reverse <ul style="list-style-type: none"> • V+ (L): DC + or Live wire • V- (N): DC - or Naught wire • E.G: Earth Grounding, connects to System chassis ground
Hi-Pot Insulation	AC 1.5KV : Ethernet Port to Port, Ethernet Port to Power, Ethernet to Chassis Ground, Power to Chassis
Performance & Scalability	
Switch Technology	Store and Forward Technology with 20Gbps Non-Blocking Switch Fabric Forwarding rate: 14.88Mpps
MAC Address Table	16K-Entry L2 MAC Table
Packet Buffer	8.4 Mbit SRAM for Packet Buffer
Jumbo Frame Size	12K Bytes jumbo packet size
VLAN Table Size	4K VLAN Entries
Spanning Tree	16 Spanning Tree Instances for RSTP (IEEE 802.1d)
IGMP	IGMP V2/V3 and Snooping for MLD v1/v2
Link Aggregation	IEEE802.3ad Link Aggregation Control Protocol (LACP), 3 groups (Max.) of link aggregators (2 ports aggregated)
Traffic Prioritize	8 physical queues for each port, IEEE 802.1p QoS and DSCP (IPV4/ IPV6)
Rate Control	Ingress/ Egress bandwidth control , 16kbps/ per step up to 1Gbps (Max.)
Isolated Port	Communication between isolated port is forbidden.

Power Requirement	
Input Voltage	DC 24V, Rating 10~36Vdc, Power Input with Auto Polarity Reverse function Low AC Voltage 11~27Vac for the Building Automation Control
Auto Polarity Reverse	Yes
Power Consumption	7 watts (Maximum) / DC 24V; 6watts (maximum)/ DC12V 6 watts (maximum)/ AC 12V; 5.5 watts (maximum)/ AC 18V; 6.5watts (maximum)/AC 27V
Mechanical	
Installation	DIN Rail Mounting
Enclosure Material	Black Color Plastic , ABS+PC, Anti-U/V
Dimension	108 mm (W) x 88 mm (H) x 64 mm (D) / with DIN Rail Clip
Protection	IP30 Ingress Protection, compliance with Pollution Degree 2
Weight	400g without package (To be update)
Software Features	
System Management	WeB GUI, Command Line Interface (CLI), IPv4/IPv6(RFC2460), Telnet, LLDP, DHCP Server/Client/Option 43/Option 82, TFTP, System Log
Traffic Management	Flow Control, Rate Control, Port Mirror, Trust Mode (CoS, DSCP,COS-DSCP, IP Precedence)
Packet Filter	IGMP Snooping v2/v3, IGMP Snooping Fast-Leave/Immediate-Leave, MLD Snooping, MVR, IGMP Query,IEEE802.1Q VLAN, QinQ, GVRP
Security	HTTPs/SSH
Advanced Security	DHCP Snooping, IPSG, DoS
Network Redundancy	ITU-T G.8032 v1/v2 Ethernet Ring Protection Switching (ERPSv2), Loop Protection, Port Trunk/ IEEE 802.3ad LACP Rapid Spanning Tree Protocol/Spanning Tree Protocol (RSTP/ STP)
Time Management	NTP protocol, Local time synchronize (PC)
Access Control List	Stick MAC address port control
EEE	Supported
Environmental	
Operating Temperature & Humidity	-40°C~75°C , 0%~95% Non-Condensing
Storage Temperature	-40°C~80°C
MTBF	>200,000 hours
Hi-Pot Insulation	AC1.5 KV for Power- Chassis Ground, Power – Ethernet, Chassis Ground- Ethernet, Ethernet – Ethernet
Warranty	5 years
Standard	
EMC	EN61000-6-2/ EN61000-6-4 (Pending)
EMI	CISPR 22 (Pending)



Ordering Information

Model Name	Description
DS408H	Industrial Managed 6-port Gigabit RJ-45, 2-port SFP 100/1000Mbps Switch, DC24V (10~36V)
	Package List
	1 x Product Unit
	1 x 4-pin Removable Terminal Connector
	1 x Quick Installation Guide



Optional Accessory

Model Name	Description
PSD25-24	25W/24VDC DIN-rail power supply