

Industrial 10-port Managed Gigabit PoE Ethernet Switch
48VDC power inputs

SH-9210AT-POE

Industrial 10-port Managed Gigabit Ethernet Switch
24VDC power inputs

SH-9210F



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Features

- **Rich Managed Functions for Monitoring, Control, and Reliability**
Rich functions such as VLAN, QoS, RSTP, and SNMP are provided for monitoring, control, and network reliability.

*For a description of each function and settings, refer to "Reference Manual (Software)" or "Help."

- **Supports ambient temperatures from -35°C to +70°C**
The use of a metal casing with excellent heat dissipation achieves a wide range of temperature (-35 to +70°C) specifications, providing superior environmental resistance and durability, and allowing dependable use in harsh industrial environments.

- **PoE power supply function based on IEEE802.3af, IEEE802.3at (SH-9210AT-POE only)**

Power can be supplied to PoE devices that conform to IEEE802.3af, IEEE802.3at. Up to 30W per port and up to 180W for all ports can be powered.

- **Eight of 1000BASE-T ports are equipped**
The product has eight ports which conform to IEEE802.3ab(1000BASE-T) / IEEE802.3u(100BASE-TX)/ IEEE802.3(10BASE-T).

- **Two SFP slots**
Two SFP slots and an SFP module can be installed to support 100/1000 Base SFPs.

- **Features dual power support, and capable of operating in a wide-ranged power inputs**
The product is capable of operating in a wide range of DC power between 12 and 58VDC *1. Moreover, dual power supports the product to continue to work even if one of the power supplies fails. Failures of the power supply can be seen with the LED on the front panel or the failure detection relay circuit.

*1 The SH-9210A-POE is 47~58VDC.

- **DIN rail mounting or Wall installation**
With the supplied brackets, the product can be set on a 35mm-DIN rail or on the wall.

This product is an industrial managed switching hub equipped with two SFP slot ports and eight gigabit ports that support PoE power supply.

Due to the fan-less design, this hub can be used in the places where the quietness or a longer lifetime of the product is desired. Moreover, with metal that is excellent in heat dissipation, the product can operate in the temperature between -35 and +70°C.

Various fixing brackets are available for installations on walls and 35 mm DIN rails.

There are two supplies of power. You can use Category 5 or higher LAN cables to supply power from up to seven ports to devices that conform to IEEE 802.3af/at.

Carefully read this Reference Manual to connect the product with devices and establish the system.

* Specifications, color and design of the products are subject to change without notice.

* The contents in this document are subject to change without notice.

* Visit the CONTEC website to check the latest details in the document.

* The information in the data sheets is as of November, 2024.

Specifications

Function specification

Item		SH-9210AT-POE	SH-9210F
Ethernet			
RJ-45 Port	Specification	IEEE802.3/IEEE802.3u/IEEE802.3ab/IEEE802.3af/IEEE802.3at	IEEE802.3/IEEE802.3u/IEEE802.3ab
	Communication Method	All ports: Full/Half duplex (auto-negotiation)	
	Transmission speed	10Mbps/100Mbps/1000Mbps (auto-negotiation)	
	Number of ports	8	
SFP Port	Transmission speed	100Mbps/1000Mbps (auto-negotiation)	
	Number of ports	2	
Switching method		Store and forward	
Address table		4,096 entries	
Jumbo frame		9Kbyte	
Buffer capacity		1.75Mbits	
Aging time		300 seconds	
LED indicator		POWER x 2 (Green), ALM (Red), LINK/ACT x 8 (Green/Orange), PoE power supply x 8 (Green/Orange/Red), SFP x 2 (Green/Orange), RP (Green), RS (Green)	POWER x 2 (Green), ALM (Red), LINK/ACT x 8 (Green/Orange), SFP x 2 (Green/Orange), RP (Green), RS (Green)
Power supply voltage		47 - 58VDC±5% (53 - 57VDC recommended for IEEE 802.3at compliant)	12V - 58VDC±5%
FG pin		Power supply connector equipped with FG pin	
Current consumption (Max.)		When PoE is not in use: 53V 0.16A When PoE is in use: 53V 4.10A	12V 0.82A 24V 0.58A 48V 0.18A 53V 0.16A
Physical dimensions (mm)		130(H) x 105(D) x 62(W) (exclusive of protrusions)	130(H) x 105(D) x 47(W) (exclusive of protrusions)
Weight		1000g	700g
Module installation method		Mounting on DIN rail or on the wall	

Installation Environment Requirements

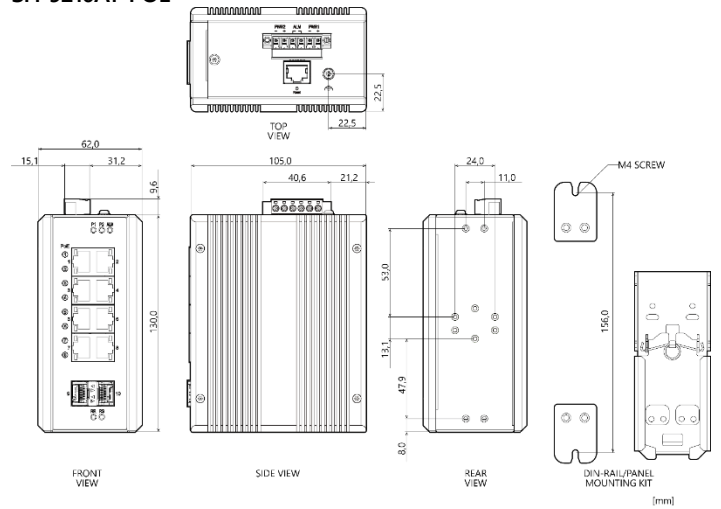
Item	Description
Non-operating ambient temperature	-35 - +70°C
Non-operating ambient humidity	5 - 95%RH (No condensation)
Floating dust particles	Not to be excessive
Corrosive gases	None
Line-Noise resistance	Line-noise AC line/2KV (EN61000-4-4Level 3, IEC61000-4-4Level 3), Signal line/1KV (EN61000-4-4Level 3, IEC61000-4-4Level 3)
	Static electricity resistance Contact discharge/±4KV (EN61000-4-2Level 2, IEC61000-4-2Level 2) Air discharge/±8KV (EN61000-4-2Level 3, IEC61000-4-2Level 3)
Vibration resistance	Linear 2 - 13.2Hz/1mm, 13.2 - 100Hz/0.7G, 90minutes each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant)
	Log 3 - 9Hz/3.5mm, 9 - 150Hz/1G, 10cycles each in X, Y, and Z directions (JIS C60068-2-6-compliant, IEC60068-2-6-compliant)
Shock resistance	147m/s ² (15G), half-sine shock for 11ms (JIS C60068-2-27-compliant, IEC60068-2-27-compliant)
Grounding	Class D grounding, SG - FG/ non-conductive
Standard	VCCI Class A, FCC Class A, CE Marking (EMC Directive Class A, RoHS Directive), UKCA

Software Specifications

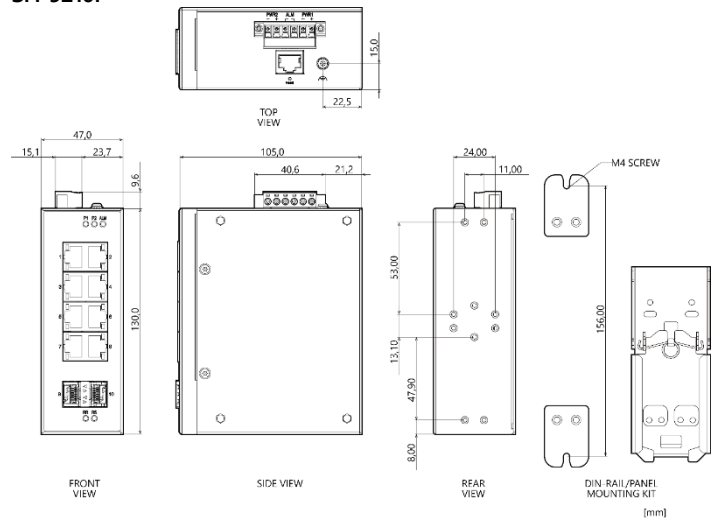
Item	Description
RingV2 protection	Link loss recovery < 20ms Single ring & chain supported
Spanning Tree Protocol	IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
Port Trunk with LACP	Static trunk or Dynamic via LACP (Link Aggregation Control Protocol)
Max VLANs	1024
VLAN Types	Port-based VLANs IEEE 802.1Q tag-based VLANs IEEE 802.1ad Double Tagging (Q in Q)
Multicast protocols	IEEE 802.1ad Double Tagging (Q in Q) Multicast protocols IGMP v1/v2/v3 IGMP snooping and querying Immediate leave and leave proxy
LLDP	IEEE 802.1ab Link layer Discovery Protocol (LLDP)
Priority	IEEE 802.1p QoS
Number of queues per port	8
Traffic Shaper	port-based shaping
Port security	IP and MAC-based access control
Storm Control	Multicast/Broadcast/Flooding Storm Control
User Management interfaces	CLI (command line interface) WEB-based Management SNMP v1, v2c, v3 Telnet
Management Security	HTTPs, SSH
Upgrade & Restore	HTTP (WEB) & FTP/TFTP (CLI) for Configuration Import/Export, HTTP (WEB) & FTP/TFTP (CLI) for Firmware Upgrade
Diagnostic	Syslog Port mirroring Ethernet Copper connection diagnostic tool SFP with DDM (Digital Diagnostic Monitoring)
MIBs	RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	Server, Client, Relay
NTP	Client

Physical Dimensions

SH-9210AT-POE



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Included Items

- Product...1
- DIN-Rail Mounting Bracket...1
- Wall Bracket...2
- Power Connector...1
- Countersunk Head Screw...4
- Pan Head Screw...4
- Console Cable...1
- Please Read the following...1

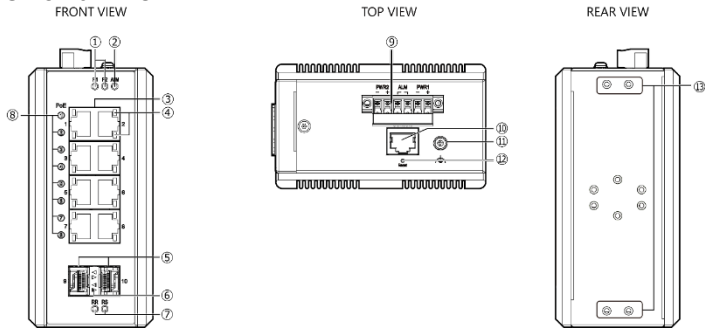
Optional Products

Item	Type	Description
SFP Module	SH-SFP-1G-LXD	1000BASE-LX SFP Module 10km SMF
	SH-SFP-1G-SXD	1000BASE-SX SFP Module 550m MMF

* Visit the CONTEC website for the latest optional products.

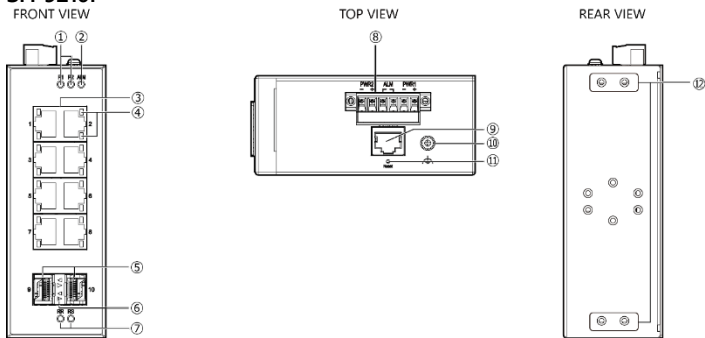
Component Name

SH-9210AT-POE



No.	Name	No.	Name
1	Power LED P1, P2	8	PoE LED
2	Power failure detection relay LED ALM	9	Power Connector: PWR1, PWR2, Power failure detection relay
3	LAN Port (RJ-45)	10	Console Port
4	Link/Act LED	11	Screw Holes for Grounding Wire (M3)
5	SFP Port	12	RESET Button
6	SFP Port LED	13	Bracket Screw Holes for Wall Installation (M3)
7	Ring/Chain LED		

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