

CC-Link IE TSN Industrial 10-port Managed Gigabit Switch SH-9210TSN



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

Features

Compliant with CC-Link IE TSN Class B

Compliant with CC-Link IE TSN Recommended Network Wiring Component Certification Class B. When constructing a network using CC-Link IE TSN, the system can be smoothly constructed between manufacturers and models.

Supports the functions of TSN

The product supports the functions of Time-Sensitive Networking (TSN). TSN is a set of extended functions designed for communications requiring real-time and high reliability in industrial networks.

- IEEE 802.1AS : Generalized Precision Time Protocol
- IEEE 802.1Qbv : Time Aware Shaper/Scheduler
- IEEE 802.1Qci : Per Stream Filtering and Policing
- IEEE 802.1Qbu / 802.3br : Frame Preemption
- IEEE 802.1CB : Frame Replication and Elimination for Reliability

Supports ambient temperatures from -10°C to +65°C

The use of a metal casing with excellent heat dissipation achieves a wide range of temperature (-10 to +65°C) specifications, providing superior environmental resistance and durability, and allowing dependable use in harsh industrial environments.

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 48VDC. 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.

DIN rail mounting or Wall installation

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

Compliant with CC-Link IE TSN Recommended Network Wiring Component Certification Class B. In addition to the IEEE802.1AS and IEEE802.1Qbv required for CC-Link IE TSN Class B, it supports many other TSN technologies.

This industrial Ethernet switch series delivers high quality, wide operating temperature range, extended power input range, IP-30 design, and advanced VLAN & QoS features. It's ideal for harsh environments and mission critical applications.

Its QoS provides enterprise-class networking features to fulfill the needs of large network infrastructure and extreme environments.

This series switch eases the effort to build a network infrastructure which offers a reliable, well managed and good QoS networking for any business requiring continuous and well-protected services in management environments. With the features such as Fast Failover ring protection and QoS, customers can ensure their network is qualified to deliver any real-time and high quality applications.

- * 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 January, 2026.

Specifications

Function specification

Item	SH-9210TSN	
Ethernet		
RJ-45 Port	Specification	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	32k entries	
Jumbo frame	9Kbyte	
Buffer capacity	4Mbits	
Aging time	300 seconds	
LED indicator	POWER x 2 (Green), ALM (Red), LINK/ACT x 8 (Green/Orange), SFP x 2 (Green/Orange)	
Power supply voltage	12 - 48VDC±5%	
FG pin	Power supply connector equipped with FG pin	
Current consumption (Max.)	12V : 1.91A 24V : 0.85A 48V : 0.42A	
Physical dimensions (mm)	193(H) x 161.5(D) x 61.6(W) (exclusive of protrusions)	
Weight	2,300g	
Module installation method	Mounting on DIN rail or on the wall	

Installation Environment Requirements

Item	Description
Operating ambient temperature	-10 - +65°C
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 - 132Hz/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, CC-Link IE TSN Recommended Network Wire Part Authentication Class B

Software Specifications

Item	Description
TSN	
Generalized Precision Time Protocol	IEEE 1588v2 / 802.1AS gPTP
Time Aware Shaper/Scheduler	IEEE 802.1Qbv
Per Stream Filtering and Policing	IEEE 802.1Qbu/802.3br
Frame Preemption	IEEE 802.1Qci
Frame Replication and Elimination for Reliability	IEEE 802.1CB
Credit-Based Shaper (CBS)	IEEE 802.1Qav
Cyclic Queuing and Forwarding	IEEE 802.1Qch
Managed functions	
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; RFC 2674 Q-Bridge MIB RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
DHCP	Server, Client, Relay
NTP	Client

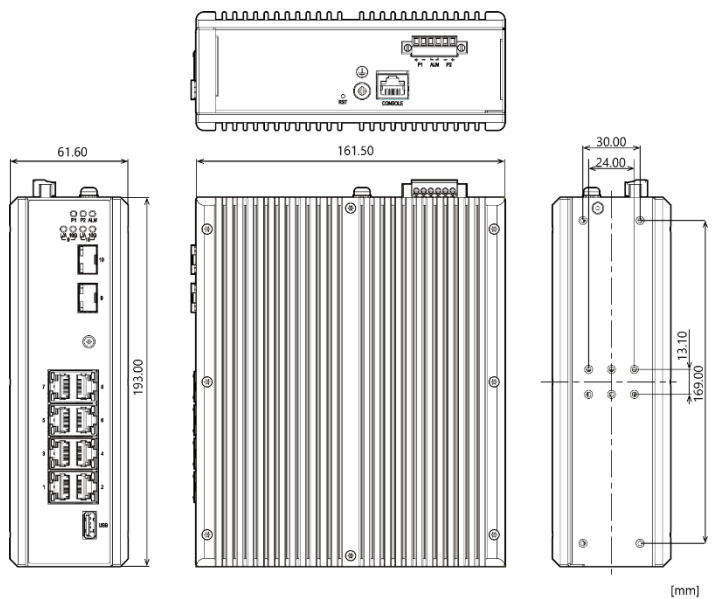
Optical Products

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

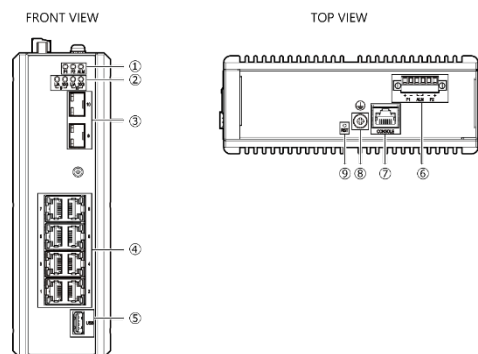
Included Items

- Product...1
- DIN-Rail Mounting Bracket...1
- Wall Bracket...2
- Power Connector...1(Dinkle : EC381VM-06P)
- Countersunk Head Screw...4
- Pan Head Screw...4
- Console Cable...1
- Please Read the following...1

Physical Dimensions



Component Name



No.	Name	No.	Name
1	Power LED P1, P2, ALM	6	Power Connector: PWR1, PWR2, Power failure detection relay
2	SFP Port LED	7	Console Port
3	SFP Port	8	Screw Holes for Grounding Wire (M3)
4	LAN Port (RJ-45)	9	RESET Button
5	USB Port		