

ISM3010D Series Managed Industrial Ethernet Switch



Key Features:

- ☑ Passed industrial class IV electromagnetic compatibility test
- ☑ G.8032v2 (recovery time <20ms), iRing, RSTP/STP for network redundancy
- ☑ RADIUS, TACAS+, IEEE802.1x to enhance network security
- ☑ Easy network management by web browser, CLI, Telnet/serial console
- ☑ InHand NMS for providing a powerful network management tool.
- ☑ DHCP & TFTP for automatic batch configuration

Product Overview

ISM3010D series products are 10-port DIN-Rail Managed Gigabit Ethernet Switch, especially designed for applications in the field of electric power, transportation, industrial control and in other severe industrial environment. This series, which could work normally under the temperature between -40 and 85°C, has integrated convenient security management features, enterprise-class high-speed forwarding performance, strong cabinet, protected industrial circuit and other industrial features. All this series products support ITU-T G.8032v2 protocol (self-recovery time less than 5ms), iRing, STP/RSTP ring network redundancy protocol and enhanced network management protocol, all of which could satisfy reliability requirement under severe industrial environment.

Product Features

➤ Security Features

- SSH
- MAC based port security
- Port based network access control (802.1x)
- VLAN (802.1Q) to segregate and secure network traffic
- RADIUS, TACACS+, SSH to enhance network security
- SNMPv3 authentication and 56-bit encryption

➤ System Features

- RADIUS, TACAS+, IEEE802.1x to enhance network security
- Standard ITU-T G.8032v2(recovery time<5ms), iRing, RSTP/STP for network redundancy
- IGMP snooping and GMRP for filtering multicast traffic
- VLAN and GVRP to ease network planning
- Quality of Service (802.1p) for real-time traffic

- LACP (Link aggregation) for optimum bandwidth utilization
- LLDP for layer 2 link state information real-time detection

➤ Management and Maintenance

- Easy network management by web browser, CLI, Telnet/serial console
- Rich LED panel indication , clearly display switch working status
- Management protocol base on SNMPv1/v2c/v3, provide InHand NMS(Network Management System)
- RMON for efficient network monitoring and proactive capability
- Port mirroring, convenient to analyse data of port and rapidly diagnose faults
- Support Local and remote log server function, easy to troubleshoot faults
- DHCP & TFTP for automatic batch configuration
- Automatically synchronization and backup configuration files via USB port
- Import / export configuration backup file and restore factory settings
- Local and remote firmware update function
- I/O relay terminal alarm output and mail alarm output, automatically report accident

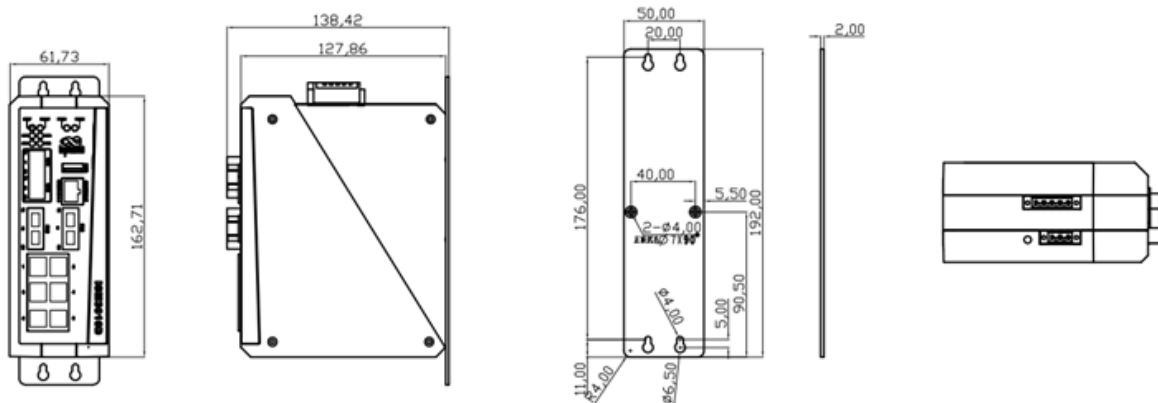
Product Specification

Item		ISM3010D
Interface	RJ45 electric port	10/100Base-T(X) auto-sensing RJ45 port
	FX optical port	100Base-FX port (SC/ST/FC port)
	GSFP port	1000Base SFP slot
	Console port	RS232(RJ45 port)
	LED indication lamp	PWR1, PWR2, STAT, FAULT, FX
Mechanical structure	Housing	IP40 protection class, fully enclosed and seamless metal cabinet, PCB protection coating available
	Dimensions (WxHxD)	62mm x 162mm x 127.5mm
	Weight	0.88 kg
	Heat dissipation mode	Fanless heat dissipation
	Installation mode	Guide rail and wall mounting (kit optional)
Power source	Input voltage	24VDC(12~48VDC), Support redundant input (standard specification) 48VDC(36~72VDC), support redundant input (optional)
	Interface terminal	5-pin pluggable screw connection terminal
	Overload protection	Available
	Reverse polarity protection	Available
	Power consumption	<7w
Working environment	Working temperature	-40 ~ +85 °C
	Storage temperature	-40 ~ +85 °C
	Relative humidity	95% (no condensing)
Switching	Forwarding inherent	<4μs

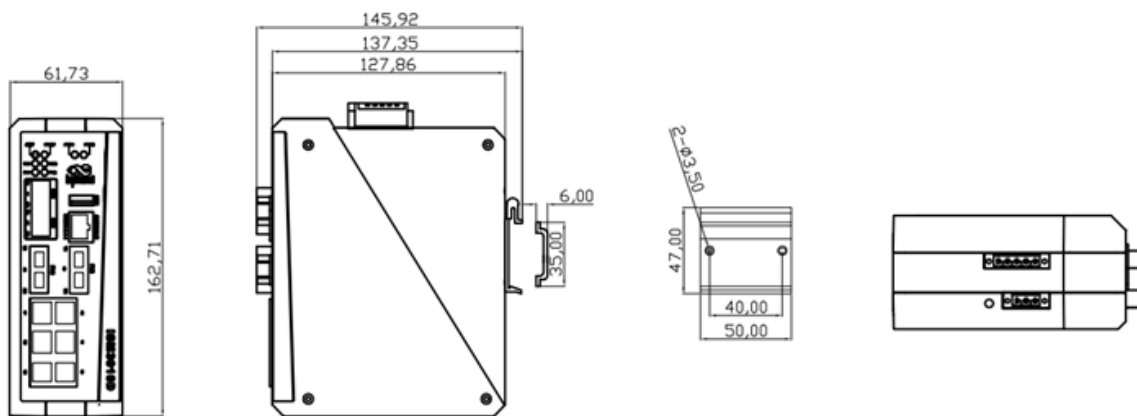
Item		ISM3010D
performance	time delay	
	Backplane bandwidth	5.6Gbps
	MAC address table	8k
	Data package buffer	1Mbit
Function features	Ethernet standard	IEEE 802.3for 10Base-T
		IEEE 802.3u for 100Base-T(X)and 100Base-FX
		IEEE 802.3ab for1000Base-T
		IEEE 802.3Z for1000Base-SX/LX
		IEEE 802.3x for flow control
		IEEE 802.1D for Spanning Tree Protocol
		IEEE 802.1D for MAC Bridges
		IEEE 802.1D for GMRP
		IEEE 802.1w for Rapid STP
		IEEE 802.1Q for VLAN Tagging
		IEEE 802.1p for Class of Service
		IEEE 802.1X for access control base on port and MAC address
		IEEE 802.3ad for Port Trunk with LACP
	Industrial protocol conversion	Support Modbus/TCP, OPC
	Multicast features	The maximum number of IGMP group is 256
		Support GMRP
		IGMP Snooping multicast filtering
Port mirroring	Support multiple port mirroring function	
Broadcast storm suppression	Support	
QoS priority queue	4	
VLAN function	Port Based VLAN	
	The max number of VLAN is 255	
	VLAN ID range:1~4094	
	Support GVRP	
High reliability	Ring protocol	Support base on international standard ITU-T G.8032v2 ring network protocol (recovery time <5 ms)
		Support iRing protocol
		Support STP,RSTP protocol
		Support single ring, double ring, tangent ring, cross ring
	LLDP	Support layer 2 link status information detection
Link aggregation	Support multiple link aggregation base on LACP function	
Device maintenance	Management way	Support command line interface (CLI) ,WEB configuration way
		Support Telnet, SSH
		Support RADIUS, TACACS+
	Network manage protocol	Support SNMPv1/v2c/v3
		Support RMON
Alarm output	Rated capacity:5A @250V AC,5A@ 30V DC	

Item		ISM3010D
		Maximum permissible power:1250VA,150W
		Maximum permissible voltage:380V AC,125V DC
		Maximum permissible current:5A AC,5A DC
	Email alarm output	Support email alarm output
		Support email sever address, port, username and password configuration
		Support multiple alarm email destination address
	System status display	Support CPU load statistics
		Support memory usage status display
		Support host online time status display
		Support firmware version information display
Backup/Restore	Support the model ,serial number, host name display	
	Support import/export backup configuration file and restore the factory settings.	
System log	Support local log and remote log server function, convenient to troubleshoot	
System upgrade	Support local/remote firmware upgrade function	
Installation	Support DIN-rail(standard), wall mounting (optional)	
MTBF	35 years	
Industrial standard	Electromagnetic compatibility	IEC 61000-4-2(Electrostatic discharge) level 4
		IEC 61000-4-3(Radiated, radio-frequency, electromagnetic field) level 4
		IEC 61000-4-4(Electrical fast transient/burs) level 4
		IEC 61000-4-5(surge) level 4
		IEC 61000-4-6(Immunity to conducted disturbances, induced by radio-frequency fields) level 4
		IEC 61000-4-8(Power frequency magnetic field) level 5
	Impact	IEC60068-2-27
	Freefall	IEC60068-2-32
Vibration	IEC60068-2-6	
Certifications		CE, FCC, UL, RCM
	Warranty	5 years

Dimensions



Wall Mount



DIN-Rail Mount

Ordering Information

1. Ordering information

Product Model	Port				
	10/100Base-T X	100BaseFX optical port(SC/ST/FC)			SFP slot
		Multimode duplex fiber	Single mode duplex fiber	Single mode single fiber	
ISM3010D-8T-2GSFP-24	8	-	-	-	2
ISM3010D-6T-2GSFP-2M -24	6	2	-	-	2
ISM3010D-6T-2GSFP-2S -24	6	-	2	-	2
ISM3010D-6T-2GSFP-2B -24	6	-	-	2	2

Note:

- Multimode double fiber support 2km;Single mode double fiber20/40/80/120KM;Single mode single fiber support0.5/20/40/60/80/120KM
- The default configuration DC24V low-voltage power supply

2. SFP optical module ordering information

Name	Description
SFP-GT-RJ45	Electrical module-SFP-GT-(RJ45)
SFP-GX-SXM8-LC	optical module-SFP-GX-multimode module-(850nm,0.5km,LC)
SFP-GX-SXM3-LC	optical module-SFP-GX-multimode module-(1310nm,0.5km,LC)
SFP-GX-LXS3-LC	optical module-SFP-GX-single mode module-(1310nm,10km,LC)
SFP-GX-LXS5-LC	optical module-SFP-GX-single mode module-(1550nm,10km,LC)
SFP-GX-LH40S3-LC	optical module-SFP-GX-single mode double fiber-(1310nm,40km,LC)
SFP-GX-LH40S5-LC	optical module-SFP-GX-single mode double fiber-(1550nm,40km,LC)
SFP-GX-LH80S5-LC	optical module-SFP-GX-single mode double fiber-(1550nm,80km,LC)
SFP-GX-LH100S5-LC	optical module-SFP-GX-single mode double fiber-(1550nm,100km,LC)
SFP-GX-SXB35-LC	optical module-SFP-GX-single mode single fiber-(TX1310/RX1550nm,0.5km,LC)
SFP-GX-SXB53-LC	optical module-SFP-GX-single mode single fiber-(TX1550/RX1310nm,0.5km,LC)
SFP-GX-LXB35-LC	optical module-SFP-GX-single mode single fiber-(TX1310/RX1550nm,10km,LC)
SFP-GX-LXB53-LC	optical module-SFP-GX-single mode single fiber-(TX1550/RX1310nm,10km,LC)
SFP-GX-LH40B35-LC	optical module-SFP-GX-single mode single fiber-(TX1310/RX1550nm,40km,LC)
SFP-GX-LH40B53-LC	optical module-SFP-GX-single mode single fiber-(TX1550/RX1310nm,40km,LC)
SFP-GX-LH80B45-LC	optical module-SFP-GX-single mode single fiber-(TX1490/RX1510nm,80km,LC)
SFP-GX-LH80B54-LC	optical module-SFP-GX-single mode single fiber-(TX1550/RX1490nm,80km,LC)
SFP-GX-LH100B45-LC	optical module-SFP-GX-single mode single fiber-(TX1490/RX1550nm,100km,LC)
SFP-GX-LH100B54-LC	optical module-SFP-GX-single mode single fiber-(TX1550/RX1490nm,100km,LC)

InHand Networks

InHand Networks provides reliable, secured and intelligent M2M solution for electric power, industrial automation, commercial and medical devices. Recognized by world class customers and partners. Proven by a large install base. Expanding with intensive investments in research and development. Enduring for long-term support.

InHand Networks has become leader in industrial grade network technology by providing industrial cellular routers, industrial Ethernet switches, wireless sensor network devices and cloud based M2M platforms.

Connecting devices, enabling services.



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