

ISF2008D Series Ring -type Industrial Ethernet Switch

Key Features:



- Plug and play
- iRing for network redundancy
- VLAN Secure switching
- IP40 protection class, fully enclosed metal cabinet
- Exceeds industrial class III electromagnetic specifications
- Wide operating temperature : -40 ~ 85°C
- Wide voltage range: 12 ~ 48 VDC, Dual power supplies
- Relay alarm outputs
- DIN-rail or wall mounting options

Product Overview

ISF2008D series products are eight-port unmanaged switches designed for applications in electric power, transportation, and industrial control and other severe industrial environment. It integrates high-standard wide-range temperature and voltage design, enterprise-class forwarding performance, strong cabinet, protected industrial circuit and other industrial features, is capable of plug and play, and can satisfy reliability requirement in a harsh industrial environment. The ISF series provide an unmanaged plug and play backbone to complement the managed ISM series, and is an integral part of the Ethernet ring topology.

Product Features

Simple and easy to use

- Plug-and-play functionality for rapid deployment
- Linear data forwarding to satisfy real time performance requirements
- Compatible with industrial DIN-rails or available with an optional wall-mounting kit
- IEEE 802.3x flow control and backpressure type flow controls to guarantee data integrity
- Latency under 3 μ s, satisfying the real time performance requirements of a production environment
- iRing Ethernet ring, with ring network failover time less than 30ms, even with one-hundred nodes
- Automatic ring formation, no network configuration required
- 802.1Q VLAN functionality

➤ Proven dependable industrial quality

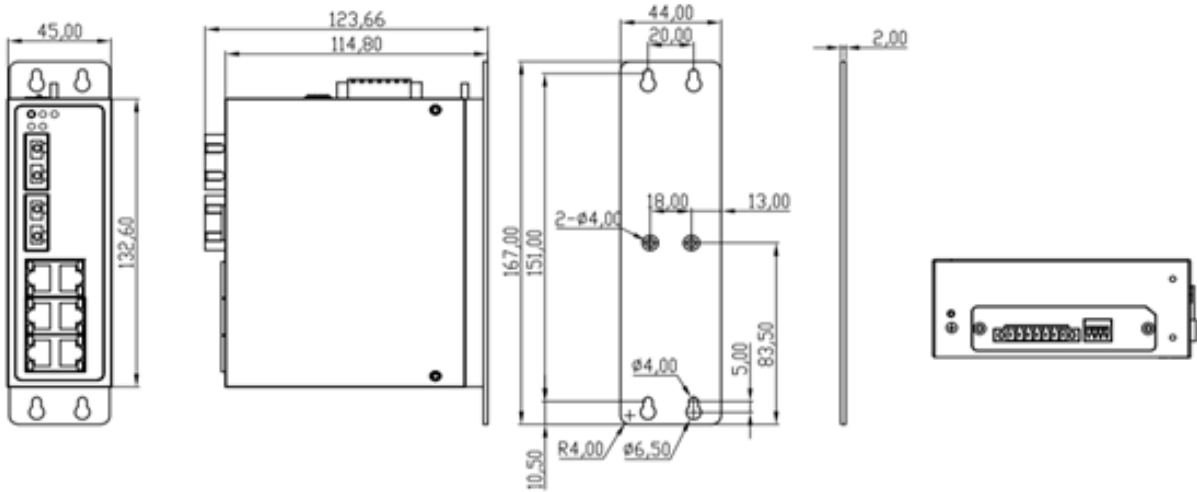
- ☑ Fault-free and reliable operation in applications such as: electric power stations, transportation, industrial control environments, and SCADA systems
- ☑ Excellent electromagnetic/radiation/electrostatic protection capacity and zero packet loss under intensive electromagnetic interference
- ☑ Excellent EMC/EMI and anti-radiation performance
- ☑ Real industrial-class design, with working temperatures at -40 ~ 85°C
- ☑ Redundant power input and industrial-class surge protections
- ☑ Tough metal cabinet with corrosion-proof coating
- ☑ IP40 seal protection: dust proof, stain proof and debris proof

Product Specifications

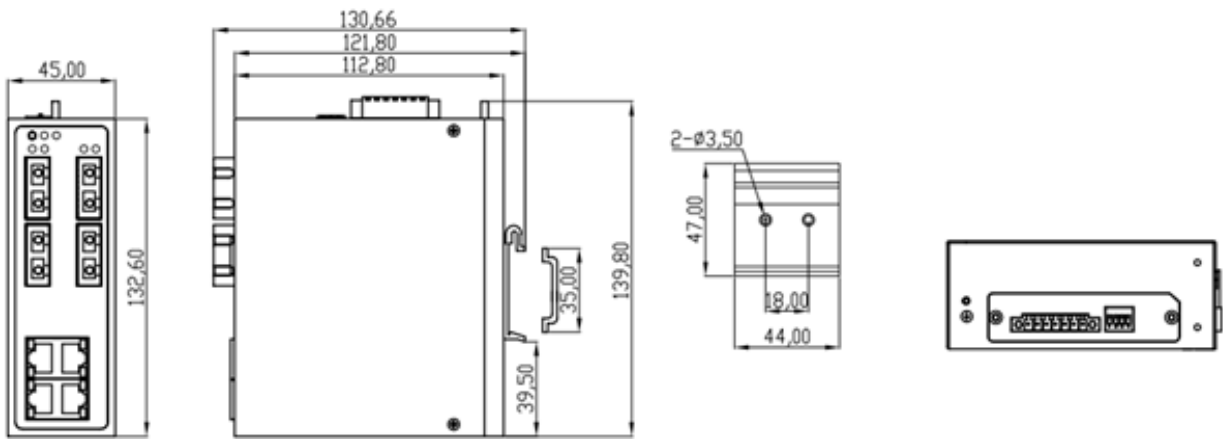
Item		ISF2008D
Interfaces	RJ45 port	10/100Base-T(X) auto-sensing RJ45 port, full dual/half dual and MDI/MDI-X self adaptive
	FX optical port	100Base-FX port (SC/ST/FC port)
	LED indication	PWR1, PWR2, STAT, FAULT, FX (fiber port)
Physical Characteristics	Housing	IP40 protection class, fully enclosed and seamless metal cabinet, PCB protection coating available
	Dimensions	45 x 132 x 112 mm
	Dimensions	1.8 x 5.2 x 4.8 in
	Weight	0.6 Kg
	Heat dissipation	Fanless heat dissipation
	Installation	DIN-rail and wall mounting (kit optional)
	MTBF	35 years
Power Source	Input voltage	24 VDC, 12 ~ 48 VDC, supporting dual inputs
	Interface terminal	7-pin pluggable screw connection terminal
	Overload protection	Available
	Reverse polarity protection	Available
	Power consumption	< 4.5w
Working Environment	Working temperature	-40 ~ 85°C

Item		ISF2008D
	Storage temperature	-40 ~ 85°C
	Relative humidity	5%~95% (non-condensing)
Switching Performance	Forwarding inherent time delay	< 4μs
	Backplane bandwidth	1 Gbps
	MAC address table	8 KBytes
	Data package buffer	1 Mbit
Features and Functions	Ethernet standard	IEEE 802.3 for 10Base-T
		IEEE 802.3u for 100Base-T(X)and 100Base-FX
		IEEE 802.3x for flow control
	Port flow control	IEEE 802.3 x flow control and backpressure type flow control, capable of enabling/disabling flow control via dip switch
	Relay alarm output	Rated control capacity: 2A@30V DC
		Maximum allowable power: 60W
		Maximum allowable voltage: 220V DC
		Maximum allowable current: 2A DC
Dip switch	Supporting enabling/disabling of broadcast storm protection, flow control and port alarms a via hardware dip switch	
Ring network function	iRing ring networking, with ring failover times under 30ms	
VLAN function	802.1Q VLAN function	
Industrial Conditions	Electromagnetic compatibility	IEC 61000-4-2(Electrostatic discharge) level 3
		IEC 61000-4-3(Radiated, radio-frequency, electromagnetic field) level 3
		IEC 61000-4-4(Electrical fast transient/burs) level 3
		IEC 61000-4-5(surge) level 3
		IEC 61000-4-6(Immunity to conducted disturbances, induced by radio-frequency fields) level 3
	IEC 61000-4-8(Power frequency magnetic field) level 4	
	Impact	IEC60068-2-27
	Free fall	IEC60068-2-32
Vibration	IEC60068-2-6	
Certifications		CE, FCC, UL
Warranty		5 years

Dimensions



Wall Mount



DIN-Rail Mount

Ordering Information

Product Model	Port			
	10/100 Base-TX	100BaseFX optical port(SC/ST/FC)		
		Multimode dual fiber	Single mode dual fiber	Single mode single fiber
ISF2008D-6T-2M-24	6	2	-	-
ISF2008D-6T-2S-24	6	-	2	-
ISF2008D-6T-2B-24	6	-	-	2
ISF2008D-5T-3M-24	5	3	-	-
ISF2008D-5T-3S-24	5	-	3	-
ISF2008D-5T-3B-24	5	-	-	3
ISF2008D-5T-2S-M-24	5	1	2	-
ISF2008D-5T-2B-M-24	5	1	-	2
ISF2008D-4T-4M-24	4	4	-	-
ISF2008D-4T-4S-24	4	-	4	-
ISF2008D-4T-4B-24	4	-	-	4
ISF2008D-4T-2S-2M-24	4	2	2	-
ISF2008D-4T-2B-2M-24	4	2	-	2

Note:

- Multimode dual fiber supports lengths of 2km
- Single mode dual fiber support lengths of 20/40/80/120KM
- Single mode single fiber supports lengths of 20/40/60/80/120KM
- Standard 24 VDC power supply included

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.



InHand Networks

3900 Jermantown Rd., Suite 150
 Fairfax, VA 22030
 USA
 T: +1-703-348-2988
 F:+1-703-348-2988
info@inhandnetworks.com
www.inhandnetworks.com