

# ISE2005D Series Unmanaged Industrial Fiber/Ethernet Switch



## Key Features:

- ✓ Modular SC, ST, FX, Dual and single mode fiber.
- ✓ 5 – 100/10 Mbps autosensing Ethernet ports
- ✓ Exceeds Industrial class III EMC specifications
- ✓ IP40 protection class, fully enclosed type metal cabinet
- ✓ Hardware DIP switches capable of disabling the broadcast storm control, port flow control, and alarm functions
- ✓ Wide operating temperature range: -40~ 85°C
- ✓ Wide voltage design: 2×24VDC(12~48VDC)
- ✓ Simple plug and play installation

## Product Overview

The ISE2005D unmanaged switch is a five port, modular solution that can fit into any fiber or Ethernet network. Specifically designed for applications in the fields of electric power, transportation, industrial control and other severe environments, the ISE2005D integrates a wide-range temperature and voltage design, enterprise-class high-speed forwarding performance, a strong cabinet, protected circuitry and other industrial features. The ISE2005D is capable of plug and play, and can satisfy reliability requirements in the harsh industrial environment.

## Product Features

### ➤ Proven, dependable industrial quality

- ✓ Fault-free and reliable operation in applications such as: electric power stations, transportation, industrial control environments, and SCADA systems.
- ✓ 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 protection
- ☑ Tough metal cabinet with corrosion-proof coating

#### ☞ Simple and easy to use

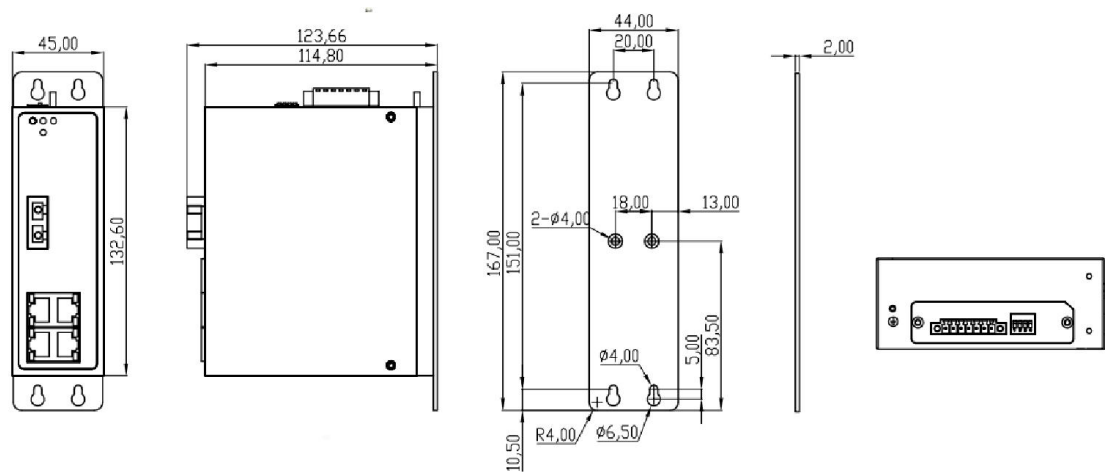
- ☑ Plug-and-play functionality for rapid deployment
- ☑ Linear data forwarding to ensure real time performance
- ☑ IEEE 802.3x flow control and backpressure type flow control to guarantee data integrity
- ☑ Compatible with industrial DIN-rails or available with an optional wall-mounting kit
- ☑ Latency under 4μs, satisfying the requirements of a production environment.
- ☑ Broadcast storm protection controllable via DIP switch
- ☑ Real-time alarms for link failures, ensuring short downtimes

### Specification

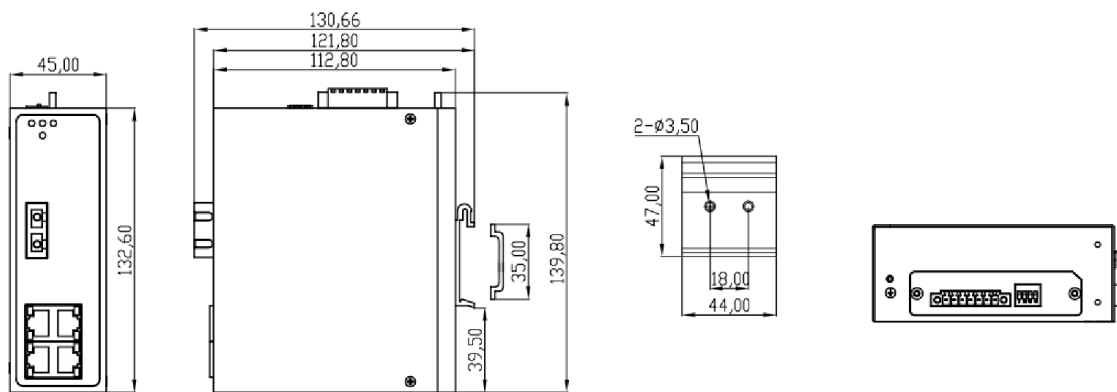
Item		ISE2005D
Interface	RJ45 port	10/100Base-T(X) self-adaptive RJ45 port,
	FX fiber port	100Base-FX port (SC/ST/FC port)
	LED indication I	PWR1, PWR2, STAT, FAULT, FX (fiber port)
Mechanical structure	Housing	IP40 protection class, fully enclosed and seamless type metal cabinet, PCB protection coating available
	Dimensions (mm)	45*132.6*112
	Dimensions (in)	1.8*5.2*4.4
	Weight	0.6 kg
	Heat dissipation mode	Fanless heat dissipation
	Installation mode	DIN- rail and wall mounting (kit optional)
	MTBF	35 years
Power source	Input voltage	12~48VDC, Supporting dual inputs
	Interface terminal	7-pin pluggable screw connection terminal
	Overload protection	Available
	Reverse polarity protection	Available
	Power consumption	< 3.7W
Working	Working	-40 ~ +85 °C

Item		ISE2005D
environment	temperature	
	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	8k
	Data package buffer	1 Mbit
Function features	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 802.3x 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	Support enabling/disabling of broadcast storm protection via hardware dip switch, flow control and port connection interruption alarm;
Industrial standard	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
	Freefall	IEC60068-2-32
	Vibration	IEC60068-2-6
Warranty period	Warranty period	5 years

## Dimensions



### Wall mounting diagram



### DIN-rail mounting diagram

## Ordering Information

Product Type	Port			
	10/100 Base-T( X)	100BaseFX Port(SC/ST/FC)		
		Multimode fiber	Single mode dual fiber	Single mode single fiber
ISE2005D-5T-24	5	-	-	-
ISE2005D-4T-M-24	4	1	-	-
ISE2005D-4T-S-24	4	-	1	-
ISE2005D-4T-B-24	4	-	-	1

- ☑ Multimode fiber may be 2 km long.
- ☑ Single mode dual fiber supports lengths of 20, 40, 80 or 120 km.
- ☑ Single mode single fiber may be 20, 40, 60, 80 or 120 km long.
- ☑ Power supply default is DC24V low-voltage.

## InHand Networks

Connecting devices, enabling services

