

14-port Full Gigabit Managed Industrial Ethernet Switch

(IS700-10E4F)

Product Description

The IIS700-10E4F series is a full gigabit managed industrial Ethernet fiber switch. It has 10*10/100/1000Base-T RJ45 ports and 4*100/1000Base-X SFP fiber ports. Each port can support wire-speed forwarding.

The IIS700-10E4F has L2+ network management function, supports IPV4/IPV6 management, supports static route forwarding, complete security protection mechanism, ACL/QoS policy, and VLAN function, and is easy to manage and maintain. Supports multiple network redundancy protocols STP/RSTP/MSTP (<50ms) and (ITU-T G.8032) ERPS (<20ms) to improve link backup and network reliability. When a one-way network fails, it can be quickly Resume communication and ensure uninterrupted communication. Configure the port management, routing address management, port traffic control, VLAN division, IGMP, and security policy based on the network management methods such as Web, CLI, SNMP, and Telnet. The IIS700-10E4F industrial Ethernet switch follows the industrial product design and materials. The outer casing is made of aluminum alloy to enhance the heat dissipation performance. It has excellent industrial field environment adaptability (mechanical stability, climatic environment adaptability, electromagnetic environment adaptability, etc.) and protection. grade IP40, support dual redundant power supply, low power fanless cooling technology, MTBF mean time between failures up to 35 years, 5 years warranty. It is suitable for industrial channels such as intelligent transportation, rail transit, power industry, mining, petroleum, shipping, metallurgy and green energy construction to form a cost-effective, stable and reliable communication network.



Product Features

- ✧ 10*10/100/1000M RJ45 ports and 4*100/1000M SFP uplink SFP slot ports.
- ✧ Support G.8032 ERPS ring network protocol (self-healing time <20ms), RSTP, STP and MSTP are used for Ethernet ring network redundancy.
- ✧ Support IPV4/IPV6 dual stack protocol, TACACS+, ACL, IEEE 802.1X, HTTPS and SSH to enhance network security.
- ✧ Support various management and maintenance of Web network management, Console, SNMP (V1/V2/V3), and Telnet.
- ✧ Support dual power supply redundancy access, support anti-reverse protection, DC48-57V input, 6KV port lightning protection, IP40 protection level.
- ✧ -40°C~+80°C working temperature, no fear of harsh environment.
- ✧ Support single-pole double-throw alarm switch interface, supporting DIN rail mounting.

Product Parameters

Model	IIS700-10E4F		
Interface Characteristics			
Fixed Port		10*10/100/1000Base-T RJ45 ports (Data)	
		4*100/1000Base-X uplink SFP fiber slot ports (Data)	
		1 * RS232 console port(115200,N,8,1)	
		2 set of V+, V- redundant DC power interface (6 Pin Phoenix terminal)	
		Power-off alarm switch (FAULT)	
Ethernet Port		10/100/1000Base-T,Auto-sensing,Full/half duplex MDI/MDI-X self-adaption	
Twisted Transmission Pair		10BASE-T: Cat3,4,5 UTP(≤100 meter)	
		100BASE-TX: Cat5 or later UTP(≤100 meter)	
		1000BASE-T: Cat5e or later UTP(≤100 meter)	
SFP Slot Port		Gigabit SFP optical fiber interface, default not matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)	
SFP Port Expansion		Turbo overclocking 2.5G optical module and ring	
Optical Fiber Distance /		Multi mode: 850nm / 0 ~500m,	
		single mode: 1310nm / 0~ 40km, 1550nm /0~120km.	
Chip Parameter			
Network Management Type		L2+	

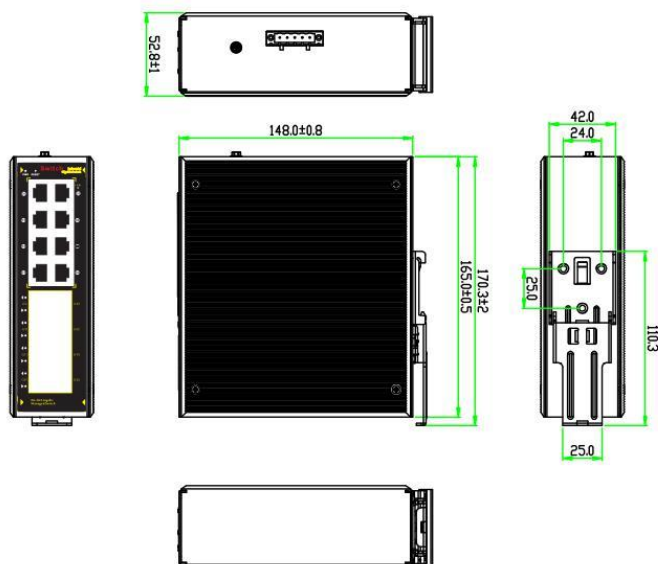
Network Protocol	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T;
	IEEE802.3u 100Base-TX/FX;
	IEEE802.3ab 1000Base-TX
	IEEE802.3z 1000Base-X
	IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	256Gbps
Forwarding	20.83Mpps
Rate@64byte	
MAC	8K
Buffer Memory	6M
Jumbo Frame	9.6K
LED Indicator	Power: PWR (green), System : SYS (green), Network: Link (yellow), SFP: L/F (green)
Reset Switch	Yes, Press and hold the reset switch for 10s and release it to restore the factory settings
Power	
Working Voltage	12-48VDC, 6 Pin industrial Phoenix terminal, support anti-reverse protection.
Power Consumption	Standby<10W;Full load<15W
Power Supply	No, optional 24V/24W industrial power supply
Physical Parameter	
Operation TEMP / Humidity	-40~+80°C;5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+85°C;5%~95% RH Non condensing
Dimension (L*W*H)	165*148*54mm
Net /Gross Weight	<1.1kg / <1.4kg
Installation	Desktop, DIN rail
Certification & Warranty	
Lightning protection protection level /	Lightning protection: 6KV 8/20us; Protection level: IP40
	IEC61000-4-2(ESD):±8kV contact discharge,±15kV air discharge
	IEC61000-4-3(RS):10V/m(80~1000MHz)

	IEC61000-4-4(EFT): power cable:±4kV; data cable:±2kV
	IEC61000-4-5(Surge):power cable:CM±4kV/DM±2kV; data cable:±4kV
	IEC61000-4-6(radio frequency transmission):10V(150kHz~80MHz)
	IEC61000-4-8(power frequency magnetic field):100A/m;1000A/m ,1s to 3s
	IEC61000-4-9(pulsed magnet field):1000A/m
	IEC61000-4-10(damped oscillation):30A/m 1MHz
	IEC61000-4-12/18(shockwave):CM 2.5kV,DM 1kV
	IEC61000-4-16(common-mode transmission):30V; 300V,1s
	FCC Part 15/CISPR22(EN55022):Class A
	IEC61000-6-2(Common Industrial Standard)
Mechanical Properties	IEC60068-2-6 (anti vibration)
	IEC60068-2-27 (anti shock)
	IEC60068-2-32 (free fall)
Certification	CCC;CE mark, commercial; CE/LVD EN60950;FCC Part 15 Class B; RoHS
Warranty	5 years , lifelong maintenance.
Network Management Features	
Interface	IEEE802.3X (Full-duplex)
	Port temperature protection setting
	Port green Ethernet Energy-saving setting
	Broadcast storm control based on port speed
	The speed limit of the message flow in the access port.
	The minimum particle size is 64Kbps.
Layer 3 Features	L2+ network management ,IPV4/IPV6 management
	L3 soft routing forwarding,
	Static route, Default route @ 128 pcs, APR @ 1024 pcs
VLAN	4K VLAN based on port, IEEE802.1q
	VLAN based on the protocol
	VLAN based on MAC
	Voice VLAN, QinQ configuration
	Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation

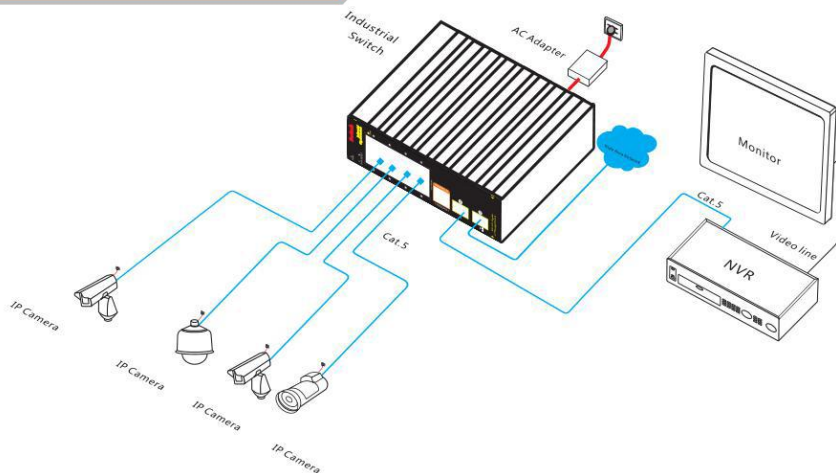
	Max 7 aggregation groups and 8 ports per group.
Spanning Tree	STP (IEEE802.1d),RSTP (IEEE802.1w),MSTP (IEEE802.1s)
Industrial Ring Network Protocol	G.8032 (ERPS),Recovery time less than 20ms
	250 Ring at most, Max 1024 devices per ring.
Multicast	MLD Snooping v1/v2,Multicast VLAN
	IGMP Snooping v1/v2, Max 250 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based Rate Limiting
	Flow-based Packet Filtering
	8*Output queues of each port
	802.1p/DSCP priority mapping
	Diff-Serv QoS,Priority Mark/Remark
	Queue Scheduling Algorithm (SP, WRR, SP+WRR)
ACL	Port-based Issuing ACL,ACL based on port and VLAN
	L2 to L4 packet filtering, matching first 80 bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	IP-MAC-VLAN-Port binding
	ARP inspection,Anti-DoS attack
	AAA & RADIUS,MAC learning limit
	Mac black holes,IP source protection
	IEEE802.1X & MAC address authentication
	Broadcast storm control,Backup for host datum
	SSH 2.0,SSL,Port isolation,ARP message speed limit
	User hierarchical management and password protection
DHCP	DHCP Client,DHCP Snooping, DHCP Server,DHCP Relay
Management	One-key recovery
	Cable Diagnose,LLDP
	Web Management (HTTPS)
	NTP,System work log,Ping Test
	CPU instant utilization status view
	Console/AUX Modem/Telnet/SSH2.0 CLI

	Download & Management on FTP, TFTP, Xmodem, SFTP,SNMP V1/V2C/V3
	NMS - smart network management system platform(LLDP+SNMP)
System	Category 5 Ethernet network cable
	Web browser: Mozilla Firefox 2.5 or higher, Google browser chrome V42 or higher, Microsoft Internet Explorer10 or later;
	TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in a network

Product size



Application



Order Information

Model	Description	Recommended Power Supply
IS700-10E4F	L2+ managed industrial Ethernet fiber switch with 10*10/100/1000M RJ45 ports and 4*100/1000M SFP fiber ports. It can support DC dual power supply and DIN rail mounting.1 way alarm switch output.	24W
Note: Industrial Ethernet switch does not match the SFP optical module and power supply.		

PACKING LIST

PACKING LIST	CONTENT	QTY	UNIT
	14-port full gigabit managed industrial Ethernet switch	1	SET
	RJ45-DB9 Line	1	PC
	User Guide	1	PC
	Warranty Card	1	PC