

18-Port Full Gigabit Managed Industrial Ethernet Fiber Switch

(IS700-16E2F-30W)

Product Description

The IS700-16E2F-30W is a full gigabit managed industrial Ethernet fiber switch. It has 16*10/100/1000Base-T RJ45 ports and 2*100/1000Base-X SFP fiber slot ports. Each port can support wire-speed forwarding.

The IS700-16E2F-30W has L2+ full network management function, supports IPV4/IPV6 management, static route full line rate forwarding, security protection mechanism, ACL/QoS policy and rich VLAN functions, 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 one-way network fails, communication can be quickly restored to ensure important Uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as port traffic control, VLAN division, and SNMP through the Web network management mode. It meets the needs of various industrial Ethernet application environments and is suitable for industrial, intelligent transportation, rail transit, power industry, mining, petroleum, marine, metallurgical and green energy construction to form a cost-effective, stable and reliable communication network.



Product Features

● Gigabit access, Gigabit SFP port uplink

- ✧ A combination of Gigabit Ethernet port and Gigabit SFP port to meet the networking requirements of various scenarios.
- ✧ Support non-blocking wire-speed forwarding.
- ✧ Support full-duplex based on IEEE802.3x and half-duplex based on backpressure.

● Strong business processing capability

- ✧ IEEE802.1Q VLAN, flexible VLAN division, Voice VLAN, and QinQ configuration.
- ✧ QoS, Priority mode based on 802.1P, Port & DSCP, queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- ✧ ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- ✧ IGMP V1/V2 and IGMP Snooping.
- ✧ ERPS/STP/RSTP/MSTP.
- ✧ Static and dynamic aggregation.

● Security

- ✧ 802.1X authentication.
- ✧ Port isolation, Storm control.
- ✧ IP-MAC-VLAN-Port binding.

● Stable and reliable

- ✧ Low power consumption, No fan, aluminum shell.
- ✧ Self-developed power supply, high redundancy design, providing a long term and stable PoE power output.
- ✧ CCC, CE, FCC, RoHS.
- ✧ The user-friendly panel, it can show the device status through the LED indicator of PWR, Link, L/A, SPEED.

Product Parameters

Model	IS700-16E2F-30W	
Interface Characteristics		
Fixed Port		16*10/100/1000Base-T RJ45 ports (Data)
		2*100/1000Base-X uplink SFP slot ports(Data)
		1 * RS232 console port(115200,N,8,1)
		1*AC100-240V power input port
		2*DC12-48V power input port (support anti-reverse)
		Alarm switch (FAULT)
Ethernet Port	Port 1-16 support 10/100/1000Base-T(X),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 matching optical modules (optional order single-mode / multi-mode, single fiber / dual fiber optical module. LC)	
Optical Cable	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;
		IEEE802.3ab 1000Base-T
		IEEE802.3z 1000Base-X
		IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)	
Switching Capacity	256Gbps	
Forwarding	26.78Mpps	
Rate@64byte		
MAC	8K	

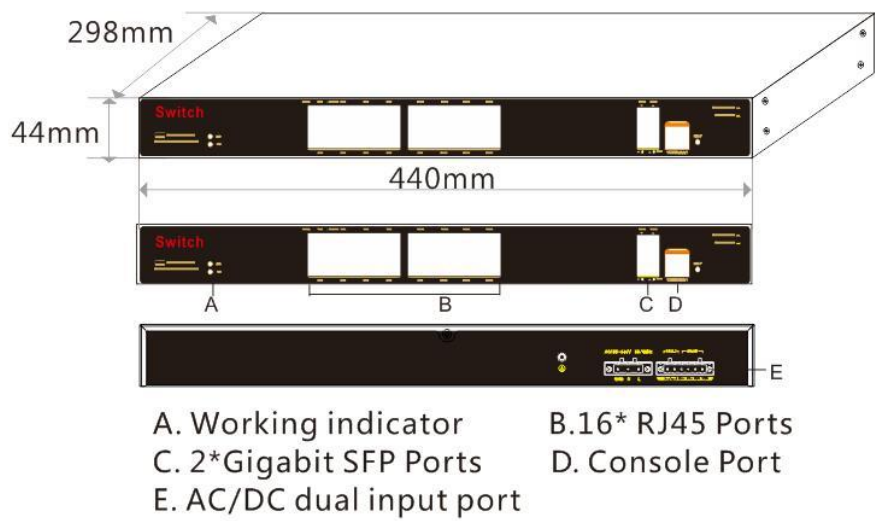
Buffer Memory	6M
Jumbo Frame	9.6K
LED Indicator	Power:PWR(yellow), system :SYS(yellow), network ;Link(yellow), Rate: SPEED: (green), Fiber port: L/A(green)
Reset Switch	Yes, One-button factory reset
Power	
Total PWR / Input Voltage	60W (AC100-240V)
Power Consumption	Standby:<16W;Full load:<30W
Power Supply	Built-in power supply, AC100~240V 50-60Hz 0.56A
Power Input Interface	Dual power input interface, AC power supply priority,
	support anti-reverse protection, power-off automatic switching DC connection; 2 set DC12-48V input interface;
	Alarm switch ; 1 set AC power input interface
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)	440*298*44mm
Net /Gross Weight	<4.7kg / <5.4kg
Installation	Desktop, 19 inch 1U cabinet
Certification & Warranty	
Port 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)
	Broadcast storm control based on port speed
	The speed limit of the message flow in the access port.
	The minimum particle size is 64Kbps.
	Port temperature protection setting
	Port green Ethernet Energy-saving setting
Layer 3 Features	L2+ Network management
	IPV4/IPV6 management
	L3 soft routing forwarding,
	Static route, Default route @ 128 pcs, APR @ 1024 pcs
VLAN	VLAN based on MAC
	VLAN based on the protocol
	Voice VLAN, QinQ configuration
	4K VLAN based on port, IEEE802.1q
	Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation
	Max 9 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
	255 Ring at most, Max 254 devices per ring.
Multicast	MLD Snooping v1/v2,Multicast VLAN

	IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	Flow-based Redirection
	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	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
	User hierarchical management and password protection
	IP-MAC-VLAN-Port binding SSH 2.0,SSL, Port isolation, ARP message speed limit
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

