

24-port 10/100M Ethernet + 4-port Gigabit SFP, Rack-mount, Managed

> Features

- Support 24-port 10/100M RJ45 + 4-port Gigabit SFP;
- Support static multicast filtering, IGMP Snooping;
- Support MW-Ring redundancy technique (failure recovery time <20ms);
- Support STP/RSTP/MSTP;
- Support managed function such as VLAN, QoS, Trunking, and port mirroring;
- Support CLI, WEB, Telnet, SNMP management;
- Support firmware upgrade online;
- Support relay alarm output;
- Support indicator status display;
- Support IP40 protection, aluminum alloy shell, fanless design;
- Support Broadcast storm suppression;
- Support dual AC/DC 220V power supply;
- Support FC/ST/SC Fiber connector Optional;
- Power supply input support anti-reverse protection and non-polarity;
- Support over Voltage, over current, EMC protection;
- Support wide operating temperature range from -40-75°C;
- 1U, 19-inch Rack-mount Installation;
- Comply with IEC61850-3 standard;

> Introduction

IES1028-4GS is a rugged industrial grade, Rack-mount, layer2, Managed Ethernet switch which supports 24-port 10/100M Base-T(X) + 4-port Gigabit SFP. It provided some kinds of advanced network managed function, such as: MW-Ring redundancy technology (failure recovery time<20ms), VLAN, multicast, Quality of Service, Speed control, port mirroring, fault alarm and firmware remote update, also support CLI, WEB, Telnet, SNMP management, provide a user-friendly web console interface for easy configuration.

UPCOM IES1028-4GS adopts standard Industrial design, IP40 protection, aluminum alloy shell, support 1U, 19-inch Rack-mount installation, fanless design, EMC level 4 protection, dual power AC/DC220V, can satisfied the requirement of various industrial applications such as Intelligent Transportation System, Security Surveillance, Industrial Automation, Smart Grid, Rail Transportation Industry, Safely City, and New Energy, etc.

> Application

- Intelligent Transportation System
- Industrial Automation
- Security Surveillance
- New Energy and Utilities
- Data Center Network
- Electric Power Industry
- Smart City



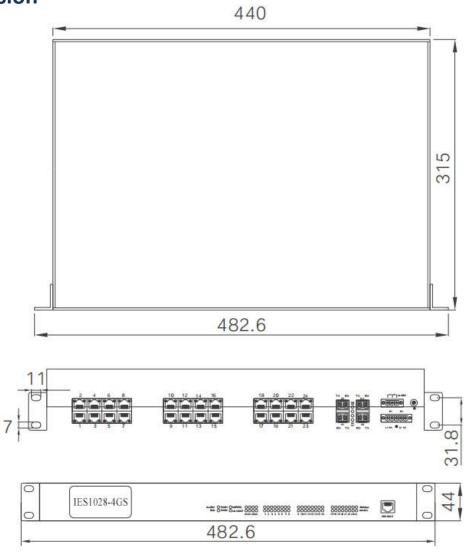
> Specification

Specification		
Product Name	28-port 10/100M Rack-mount Managed layer2 Industrial Ethernet switch	
Product Model	IES1028-4GS	
Port Definition	24-port 10/100M RJ45 + 4-port Gigabit SFP + 1 Console port	
100M Fiber port	SC/FC/ST connector Optional	
Gigabit Fiber	SFP optical port, LC connector	
Console port	RS232/RJ45	
Terminal block for power input	5-pin 5.08mm terminal block	
Terminal block for relay alarm	3-pin 5.08mm terminal block, 1A@24VDC	
Software Function		
	Support port Rate limit, flow control	
Switch Properties	Support port aggregation	
	Support IEEE 802.1Q VLAN and broadcast storm suppression	
De desado a os caracteros d	Support MW-Ring redundancy and the recovery time<20ms	
Redundancy protocol	Support STP/RSTP	
Multicast	Support IGMP v1/v2, IGMP Snooping	
ividiticast	Support GMRP and Support static multicast filtering	
Security	Support IEEE 802.1x,HTTP,RADIUS,user grading and MAC address binding	
Sorvice quality management	Supports SP and WRR queuing	
Service quality management	Support QoS setting	
IP address management	Support DHCP server	
Management and maintenance	Support Console and Web management	
	Support SNMPv1/v2c	
	Support unified PC software management	
	Support software updating	
	Support the IP/MAC address conflict alarm	
	Support power off, power alarm, port alarm	
	Support port mirroring	
	Support log viewing	
	Support Link-check and NTP	
	Support accept and transfer frame statistics	

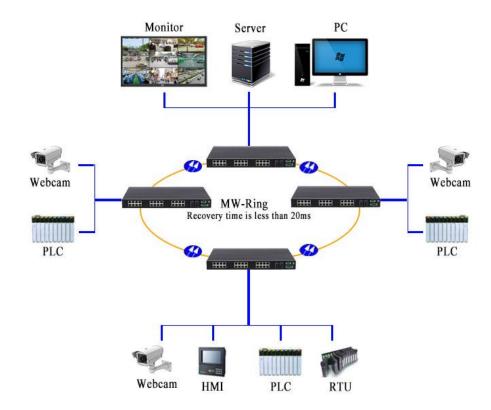
Switch capabilityPriority Queues8VLAN Number4096IGMP Groups1KMAC Table Size8KBackplane bandwidth12.8GbpsSwitch Delay<5μsCommunication distanceTwisted-pair100m(CAT5/CAT5e cable)Multi-mode fiber10/100Base multi-mode: 850nm 2kmSingle mode fiber10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120kmLED indicator lightsPort light: LINK/ACT;SPEED; Running light: RUNPower LED: PWR1/PWR2 Alarm light: ALARMAlarm light: ALARMBack panel LED lightsRJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT;SPEEDFiber light: LINK/ACTFiber light: LINK/ACT;SPEEDFull-load consumption40WOverload protectionsupportInversed protectionsupportWorking Environment40°C~75°CStorage temperature40°C~85°CAmbient Humidity5%~95% (non-condensing)	Ethernet Standard	IEEE802.3-10BaseT IEEE802.3u-100BaseTX/100Base-FX IEEE802.3x-Flow Control IEEE802.1D-Spanning Tree Protocol IEEE802.1w-Rapid Spanning Tree Protocol IEEE802.1Q -VLAN Tagging IEEE802.1p -Class of Service IEEE802.1X-Port Based Network Access Control		
VLAN Number 4096 IGMP Groups 1K MAC Table Size 8K Backplane bandwidth 12.8Gbps Switch Delay <5μs	Switch capability			
IGMP Groups1KMAC Table Size8KBackplane bandwidth12.8GbpsSwitch Delay<5μs	Priority Queues	8		
MAC Table Size 8K Backplane bandwidth 12.8Gbps Switch Delay <5μs Communication distance Twisted-pair 100m(CAT5/CAT5e cable) Multi-mode fiber 10/100Base multi-mode: 850nm 2km Single mode fiber 10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120km LED indicator lights Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM RJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption 40W Overload protection support Redundancy protection support Redundancy protection support Working Environment Operating Temperature 40°C~85°C Ambient Humidity 5%~95% (non-condensing)	VLAN Number	4096		
Backplane bandwidth 12.8Gbps Switch Delay <5μs Communication distance Twisted-pair 100m(CAT5/CAT5e cable) Multi-mode fiber 10/100Base multi-mode: 850nm 2km Single mode fiber 10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120km LED indicator lights Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM Back panel LED lights Fiber light: LINK/ACT,SPEED Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption 40W Overload protection support Redundancy protection support Redundancy protection support Working Environment Operating Temperature 40°C~85°C Ambient Humidity 5%°95% (non-condensing)	IGMP Groups	1K		
Switch Delay <spis (non-condensing)<="" 10="" 100="" 100base="" 100m(cat5="" 120km="" 1310nm="" 1550nm="" 20km;="" 2km="" 40="" 40°c~85°c="" 5%°95%="" 60="" 80="" 850nm="" <40w="" ac="" act="" act;speed="" act;speed;="" alarm="" ambient="" back="" cable)="" cat5e="" communication="" consumption="" dc220v="" distance="" dual="" environment="" fiber="" full-load="" hed="" humidity="" indicator="" input="" inversed="" led="" led:="" light:="" lights="" link="" mode="" mode:="" multi-mode="" multi-mode:="" operating="" overload="" panel="" port="" power="" protection="" pwr1="" pwr2="" r145="" redundancy="" run="" running="" single="" support="" td="" temperature="" twisted-pair="" working=""><td>MAC Table Size</td><td>8K</td></spis>	MAC Table Size	8K		
Communication distance Twisted-pair 100m(CATS/CATSe cable) Multi-mode fiber 10/100Base multi-mode: 850nm 2km Single mode fiber 10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120km LED indicator lights Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM RJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Redundancy protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 55%*95% (non-condensing)	Backplane bandwidth	12.8Gbps		
Twisted-pair 100m(CAT5/CAT5e cable) Multi-mode fiber 10/100Base multi-mode: 850nm 2km Single mode fiber 10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120km LED indicator lights Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM RJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 55%—95% (non-condensing)	Switch Delay	<5μs		
Multi-mode fiber 10/100Base multi-mode: 850nm 2km Single mode fiber 10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120km LED indicator lights Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM RJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature	Communication distance			
Single mode fiber 10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120km LED indicator lights Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM Back panel LED lights Fiber light: LINK/ACT;SPEED Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%°95% (non-condensing)	Twisted-pair	100m(CAT5/CAT5e cable)		
LED indicator lights Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM RJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT Power Input power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity Front light: LINK/ACT;SPEED Fiber light: LINK/ACT,SPEED Fiber light: LINK/ACT Power Alarm light: ALARM RJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT	Multi-mode fiber	10/100Base multi-mode: 850nm 2km		
Port light: LINK/ACT;SPEED; Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM RJ45 Port light: LINK/ACT;SPEED Fiber light: LINK/ACT Power Input power Input power Dual power AC/DC220V Full-load consumption Verload protection Inversed protection support Redundancy protection Support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity Power LED: PWR1/PWR2 RINN RAUN Power LED: PWR1/PWR2 RINN Power LED: PWR1/PWR2 Alarm light: RUN Power LED: PWR1/PWR2 Alarm light: AlaRM RJ45 POT Light: LINK/ACT; SPEED Fiber li	Single mode fiber	10/100Base single mode: 1310nm 20km; 1550nm 40/60/80/100/120km		
Front panel LED lights Running light: RUN Power LED: PWR1/PWR2 Alarm light: ALARM RJ45 Port light: LINK/ACT; SPEED Fiber light: LINK/ACT Power Input power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection Support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity S%~95% (non-condensing)	LED indicator lights			
Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Front panel LED lights	Running light: RUN Power LED: PWR1/PWR2		
Fiber light: LINK/ACT Power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)		RJ45 Port light: LINK/ACT;SPEED		
Power Input power Dual power AC/DC220V Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Back panel LED lights			
Full-load consumption <40W Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Power			
Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Input power	Dual power AC/DC220V		
Overload protection support Inversed protection support Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Full-load consumption	<40W		
Redundancy protection support Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Overload protection	support		
Working Environment Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Inversed protection	support		
Operating Temperature -40°C~75°C Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Redundancy protection	support		
Storage temperature -40°C~85°C Ambient Humidity 5%~95% (non-condensing)	Working Environment			
Ambient Humidity 5%~95% (non-condensing)	Operating Temperature	-40°C~75°C		
	Storage temperature	-40°C~85°C		
	Ambient Humidity	5%~95% (non-condensing)		
Physical Characteristics				
Shell IP40 protection, aluminum alloy shell	Shell	IP40 protection, aluminum alloy shell		

Installation	Standard 1U,19-inch rack mounting	
Dimension	482.6mm*44mm*315mm	
Industry standard		
EMC	EN61000-4-2(ESD), Level 4	
	EN61000-4-3(RS), Level 4	
	EN61000-4-4(EFT), Level 4	
	EN61000-4-5(Surge), Level 4	
	EN61000-4-6(CS), Level 4	
	EN61000-4-8, Level 5	
Impact	IEC60068-2-27	
Falling	IEC60068-2-32	
Shock	IEC60068-2-6	
Warranty		
Warranty	5 Years	
Certification	CE, FCC, RoHS	

Dimension



Connection



Ordering Information

Model NO.	Description
IES1028-4GS	24-port 10/100M Base-T(X) + 4-port Gigabit SFP, Managed, Dual AC/DC220V
IES1028-4F-4GS	20-port 10/100M Base-T(X) + 4-port 100M FX + 4-port Gigabit SFP, Managed, Dual AC/DC220V
IES1028-8F-4GS	16-port 10/100M Base-T(X) + 8-port 100M FX + 4-port Gigabit SFP, Managed, Dual AC/DC220V
IES1028-12F-4GS	12-port 10/100M Base-T(X) + 12-port 100M FX + 4-port Gigabit SFP, Managed, Dual AC/DC220V
IES1028-16F-4GS	8-port 10/100M Base-T(X) + 16-port 100M FX + 4-port Gigabit SFP, Managed, Dual AC/DC220V
IES1028-24F-4GS	24-port 100M FX + 4-port Gigabit SFP, Managed, Dual AC/DC220V

Packing List

- Industrial Ethernet Switch *1
- User manual * 1
- Certificate of quality * 1
- Warranty card * 1