



Industrial Ethernet Switches IES6028-24G-4GS

◆ 24-port 10/100/1000BaseT(X) + 4-port Gigabit (SFP slot) Managed Switch

➤ Features

- Support IEC-61850-3 ,IEEE1613
- DHCP Option 82, distributing IP address with different strategies
- Support IEC 61850 GOOSE and sampling value multicast message transmission
- Support EAPS and RSTP/STP/MSTP (IEEE 802.1w/d/s), failover time <30MS
- Support IGMP Snooping and GMRP to filter multicast package
- Support port-based VLAN, IEEE 802.1Q VLAN and GVRP protocol, easily achieve network management
- Improve the decision system via QoS--IEEE 802.1p/1Q and TOS/DiffServ
- Adopt 802.3ad, LACP to optimize the network bandwidth
- Support SNMP V1/V2c/V3 for network management of different levels
- Adopt RMON to improve the network monitoring capacity
- Bandwidth management optimized processing, precise broadcast storm control
- Port loop protection function, effectively prevent storm of looped network.
- Built-in diagnosis function, convenient for network fault analysis and troubleshooting
- Port lock is only allowed the access from authorized MAC address
- Support powerful ACL, the hardware supports L2-L7 data filtering
- Support multi-mirror for online debugging
- 2-channel redundant power input, automatic output alarm for abnormal events via Email and relay
- Configure and test the product with web browser, Telnet/Serial console
- Support LLDP link layer discovery protocol, search network topology discovery
- With the ability of resisting ARP attack and common virus.
- Working temperature: -40~75℃



➤ Introduction

IES6028-24G-4GS switch is the multi-functional and high performance network management type full gigabit industrial Ethernet switch. This series of product meets the IEC 61850-3 transformer station communication network and system authentication standards, and general industrial standards such as IEEE 1613 (transformer station). It is capable of completely meeting the demands of digital transformer station system.

IES6028-24G-4GS can build the high performance gigabit Ethernet backbone network and redundant looped network, it features the 24/48 VDC or 110/220 VDC/VAC redundant power input function to provide flexible onsite power supply, the business port adopts the rear cable output mode to meet the application requirements of the power system, therefore, it is widely applied in the fields such as power, rail transit, energy, security and industrial automation.

IES6028-24G-4GS provides 24 port 10/100/1000BaseT(X) and 4 port gigabit SFP, which supports varied advanced network management functions such as QOS, VLAN, IGMP, Snooping/GMRP, Port Trunking, SNMP V1/V2/V3, RSTP/STP and LLDP, and can completely meet the demands of operation and management by the network administrator. It supports EAPS, RSTP looped network redundancy protocol, the network link switch and recovery time is less than 30ms, which can improve the reliability of the network.

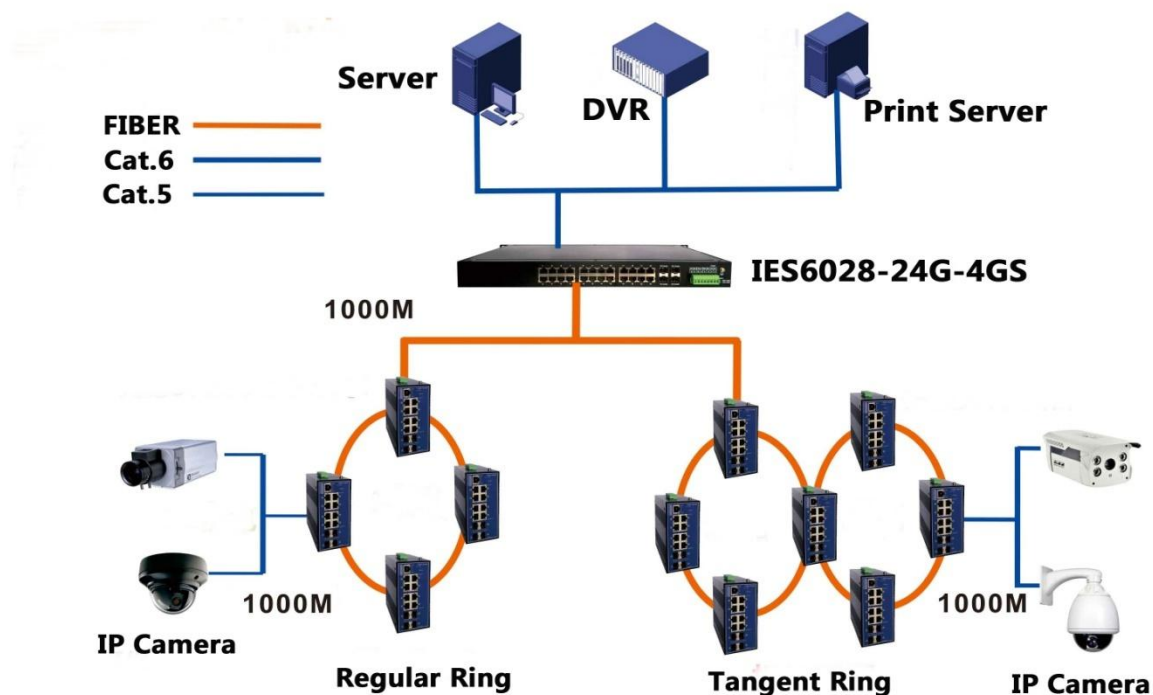
➤ Specification

| Technology | |
|-------------------------------|---|
| Standard | IEEE 804.3, IEEE804.3u, IEEE804.3z, IEEE 804.3ab, IEEE804.3x, IEEE804.1D, IEEE804.1W, IEEE804.1Q, IEEE804.1P, IEEE804.1W, IEEE 804.3ad |
| Protocol | IGMP Snooping v1, v2, v3, GMRP, GVRP, SNMPv1, v2c, v3, DHCP Snooping, BootP, TFTP/X modem, SNTP, RMON, HTTP, Telnet, SSH, Syslog, Option81/82, LLDP |
| MIB | MIB-II(RFC1213), Bridge MIB(RFC1493), RSTP MIB, RMON MIB(RFC1724) Group 1,2,3,9 |
| Flow control | IEEE804.3x flow control, back press flow control |
| Network Security | Support user hierarchical management and password protection |
| | Support IEEE 804.1x address /centralized MAC address authentication |
| | Support RADIUS authentication |
| | Support protected port |
| | Support MAC filtering |
| | Support IP+MAC+ port binding |
| Exchange attribute | |
| 1000M forward filter speed | 1488100pps |
| Transmit mode | store and forward |
| IGMP group | 256 |
| Priority queue | 4 |
| VLAN max available amount | 4K |
| VLAN ID range | 1 ~ 4094 |
| MAC address table | 8K |
| Ring recovery time | RSTP≤50ms, EAPS≤20ms |
| Rear panel bandwidth | 26G/32G/48G |
| Interface | |
| Electric port | 24 port 10/100/1000BaseT(X) |
| 1000M fiber port | 4 port 1000Base-FX (SFP port) |
| Console port | debug serial port carry out CLI command |
| Power supply | |
| Input Voltage | 220VAC(85VAC~265VAC) |
| Over current protection | available |
| Connection | 2 groups of wiring terminals |
| Reverse connection protection | available |
| Power failure alarm | available |
| Working environment | |
| Working temperature | -40~75℃ |
| Storage temperature | -40~85℃ |
| Relative Humidity | 5%~95 % (no condensation) |
| Mechanical Structure | |
| Shell | IP30 protect grade, metal shell |
| Installation | 19" 1U rack |

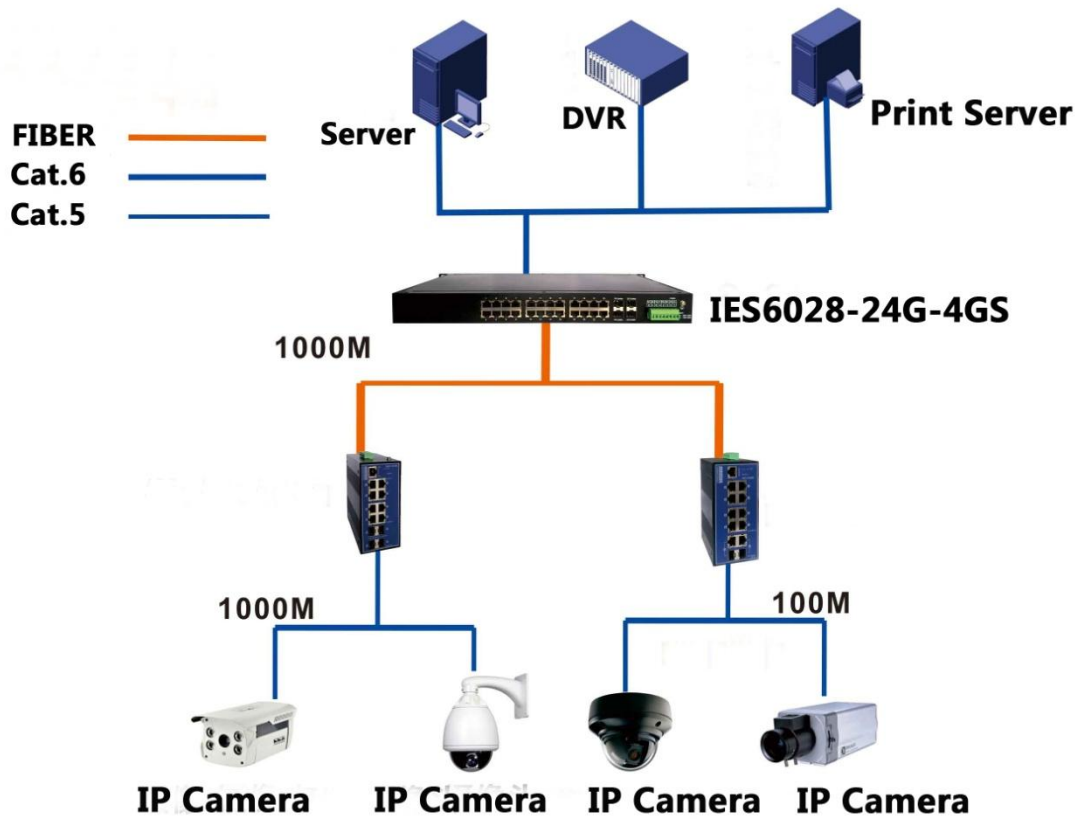
| | |
|-------------------|--|
| Size (W×H×D) | 440mm×205mm×44mm |
| Weight | 1100g |
| Industry Standard | |
| EMI | FCC Part 15, CISPR (EN55022) class A |
| EMS | EN61000-4-2 (ESD), Level 4 EN61000-4-3 (RS), Level 3 EN61000-4-4 (EFT), Level 4 EN61000-4-5 (Surge), Level 4 EN61000-4-6 (CS), Level 3 EN61000-4-8, Level 5 |
| Shock | IEC 60068-2-27 |
| Freefall | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Certification | CE, FCC, RoHS, UL508 (Pending) |
| MTBF | 10years |
| Warranty | 5 years |

➤ Application

Redundant Ring topological structure



Star network topological structure



➤ Ordering Information

| Model NO. | Description |
|-----------------|--|
| IES6028-24G-4GS | 24 port 10/10/1000/Base-T(X) + 4 port gigabit (SFP slot), 100-240VAC |
| IES6024-8G-16GS | 8 port 10/100/1000Base-T(X) + 16 port gigabit (SFP slot), 100-240VAC |
| IES608-4G-4GS | 4 port 10/100/1000Base-T(X) + 4 gigabit Combo port, 100-240VAC,48VDC |

➤ Packing List

- Industrial Ethernet switch IES6028-4G-4GS (plus terminal block)×1
- User manual × 1
- CD × 1
- Certificate of quality × 1
- Warranty card × 1
- Power cable × 1