





IES7120 Series

DIN-Rail Mounting

20-port 100M/Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 4 self-adaptive 100M/Gigabit fiber ports (SFP slot) and 16 optional 100M fiber/copper ports
- Adopt SW-Ring patented technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms
- Support dual power supply, input voltage: 12~48VDC
- Support -40~75°C wide operating temperature range

















Introduction

IES7120 series are 20-port 100M/Gigabit layer 2 managed industrial Ethernet switches. This series provide 3 products and support a variety of interfaces including 100M copper ports, 100M fiber ports and 100M/Gigabit self-adaptive SFP slots. They adopt DIN-Rail mounting to meet the requirements of different application scenes.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 802.1Q VLAN, QoS, IGMP Static Multicast, Port Trunking, Port Mirroring. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, Network Diagnosis, Rapid Configuration, Online Upgrading and so on, and supports CLI, WEB, Telnet, SNMP and other access methods. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

The input power supply is two independent power supply circuits which can ensure the normal operation of the device when one power supply fails. The design of DIP switch could implement device factory setting recovery. When power supply or port has link failure, ALARM indicator will be bright and send out alarm, meanwhile, alarm device connected to the relay will send out alarm for rapid scene troubleshooting. The hardware adopts fanless, low power consumption and wide temperature and voltage design, which has passed rigorous industrial standard tests, and suits for the industrial scene environment with harsh requirements for EMC. It can be widely used in smart grid, railway transportation, smart city, safe city, new energy, intelligent manufacturing and other industrial fields.

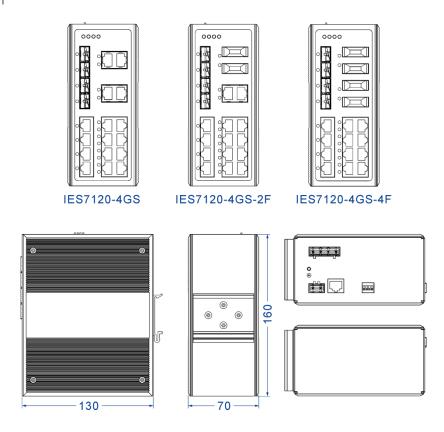
Features and Benefits

- SNMPv1/v2c is used for network management of various levels
- Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- QoS supports real-time traffic classification and priority setting
- DHCP server and DHCP client could be used for allocating IP address of different strategies
- File management is convenient for the device rapid configuration and online upgrading
- Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status
- Port statistics can be used for the port real time traffic statistics
- User password can conduct user hierarchical management to improve the device management security
- Mac port lock could strengthen the flexibility and security of network
- E-mail alarm is convenient for rapid fault discovery during remote management
- Relay alarm is convenient for troubleshooting of construction site
- Storm suppression can restrain broadcast, unknown multicast and unicast

- VLAN is used for simplifying network planning
- Port Trunking can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- IGMP Snooping, GMRP and static multicast can be used for filtering multicast traffic to save the network bandwidth
- SW-Ring and STP/RSTP can achieve network redundancy, preventing network storm
- Support SFP DDM function

Dimension

Unit:mm



Specification

IEEE 802.3 for 10Base-T
IEEE 802.3u for 100Base-TX and 100Base-FX
Standard & Protocol
IEEE 802.3z for 1000Base-X
IEEE 802.3x for Flow Control
IEEE 802.1D for Spanning Tree Protocol

| | IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1Q for VLAN IEEE 802.1p for CoS | | |
|-----------------------|--|--|--|
| Management | SNMP v1/v2c Centralized Management of Equipment, Port Mirroring, QoS, DHCP Server, DHCP Client, File Management, Port Statistics | | |
| Security | Classification of User Permissions, Port Alarm, Power Supply Alarm, E-mail Alarm | | |
| Switch Function | 802.1Q Vlan, Static Port Aggregation, Bandwidth Management, Flow Control | | |
| Unicast / Multicast | Static Multicast, GMRP, IGMP-Snooping | | |
| Redundancy Technology | SW-Ring, STP/RSTP | | |
| Time Management | SNTP | | |
| Interface | Copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning Fiber port: 100/1000Base-FX, optional SC/ST/FC; SFP interface, 100M/Gigabit self-adaption Console port: CLI command line management port(RS-232), RJ45 Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current load capability is 5A@30VDC or 10A@125VAC | | |
| Indicator | Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator | | |
| Switch Property | Transmission mode: store and forward MAC address: 8K Packet buffer size: 3Mbit Backplane bandwidth: 12.8G Switch time delay: <10µs | | |
| Power supply | 12~48VDC, 4-pin 7.62mm pitch terminal blocks Dual power supply redundancy, non-polarity and anti-reverse connection Support 4A overcurrent protection | | |

Warranty

5 years

| Power Consumption | Available Models IES7120-4GS IES7120-4GS-2F IES7120-4GS-4F | No-load (@24VDC) 5.28W 6.29W 7.50W | Full-load (@24VDC) 11.06W 11.4W 13.0W | | |
|-------------------------|---|--|---|--|--|
| Working Environment | Operating temperature: -40~75°C Storage temperature: -40~85°C Relative humidity: $5\%\sim95\%$ (no condensation) | | | | |
| Physical Characteristic | Housing: IP40 protection, metal Installation: DIN-Rail mounting Dimension (W x H x D): 70mm×160mm×130mm Weight: ≤1.1kg | | | | |
| Industrial Standard | Weight: ≤1.1kg IEC 61000-4-2 (ESD), Level 4 ■ Air discharge: ±15kV ■ Contact discharge: ±8kV IEC 61000-4-4 (EFT), Level 4 ■ Power supply: ±4kV ■ Ethernet port: ±2kV ■ Relay: ±4kV IEC 61000-4-5 (Surge), Level 2 ■ Power supply: common mode±1kV, differential mode±500V ■ Ethernet port: ±2kV ■ Relay: common mode±1kV, differential mode±500V Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6 | | | | |
| Certification | CE, FCC, RoHS | | | | |

Ordering Information

| Available Models | 100M/Gigabit SFP slot | 100M fiber port | 100M copper port | Power supply |
|------------------|--------------------------|--------------------|---------------------|-------------------|
| IES7120-4GS | 4 | _ | 16 | |
| IES7120-4GS-2F | 4 | 2 | 14 | 12~48VDC |
| IES7120-4GS-4F | 4 | 4 | 12 | dual power supply |



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