IES7120G Series

DIN-Rail Mounting

16/20-port Full Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 4 Gigabit fiber ports (SFP slots) optional, 16 Gigabit copper ports

- Adopt SW-Ring patent technology, support single ring, coupling ring, chain ring, Dual-homing ring network function, automatic recovery time of network failure < 20ms

- Full Gigabit bandwidth can enable high performance and speed transmission of large amounts of video, voice, and data

- Support dual power supply input, input voltage: 12~48VDC

- Support -40~75℃ wide operating temperature range

CE FC U.S.A RoHS cULus LISTED SW-Ring <20ms RECOVERY Industrial Grade RPS IP40

Introduction

IES7120G series are 16/20-port full Gigabit layer 2 managed industrial Ethernet switches. This series of products provide Gigabit copper port and Gigabit SFP slot. It adopts 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/MSTP, 802.1Q VLAN, QoS, IGMP Static Multicast, LLDP, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, 802.1X Authentication, 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.

Power supply input is two independent power supply circuits, which can ensure the device normal operation when one of the power supplies breaks down. Design of DIP switch can achieve the device rebooting and restore factory defaults. When power supply or port link failure occurs, ALARM indicator will be bright and send out alarm, meanwhile, alarm device connected to the relay will send out alarm for rapid scene troubleshooting. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in smart grid, rail transit, smart city, safety city, new energy, intelligent manufacturing and other industrial fields.
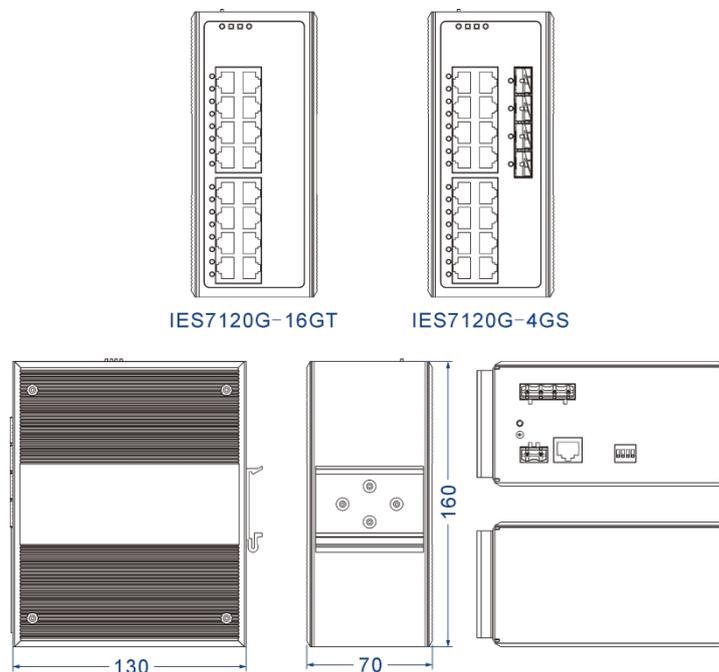
Features and Benefits

⊙ SNMPv1/v2c/v3 is used for network management of various levels

⊙ RMON can be used for efficient and flexible network monitoring

⊙ Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging

⊙ QoS supports real-time traffic classification and priority setting

⊙ LLDP can achieve automatic topology discovery, which is convenient for visual management

⊙ DHCP server and client can be used for distributing IP address

⊙ File management is convenient for the device rapid configuration and online upgrading

⊙ Log management has recorded booting, operation and connection information

⊙ Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status

⊙ Port statistics can be used for port real-time traffic statistics

⊙ User password can conduct user hierarchical management to improve the device management security

⊙ Anti-attack control, ACL and 802.1X authentication can enhance the network flexibility and security

⊙ E-mail alarm is convenient for immediate fault discovery during remote management

⊙ Relay alarm is convenient for troubleshooting of construction site

⊙ Storm suppression can restrain the broadcast, unknown multicast and unknown unicast

⊙ SSHD configuration can achieve data transmission encryption, preventing DNS and IP spoofing

⊙ TELNET and HTTPS configuration can guarantee the data access security

⊙ VLAN is used for simplifying network planning

⊙ Port trunking and LACP 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

⊙ Support Port Isolation in the same VLAN

⊙ SW-Ring and STP/RSTP/MSTP can achieve network redundancy, preventing network storm

⊙ Network Diagnosis and Troubleshooting can be conducted via Ping, Traceroute and Port Loopback

Dimension

Unit:mm

IES7120G–16GT   IES7120G–4GS

Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T 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 802.1s for Multiple Spanning Tree Protocol IEEE 802.1Q for VLAN IEEE 802.1p for CoS IEEE 802.1X for 802.1X Authentication IEEE 802.1AB for LLDP IEEE 802.3ad for LACP
Management	SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, Port Mirroring, QoS, LLDP, DHCP Server, DHCP Client, File Management, Log Management, Port Statistics
Security	Classification of User Permissions, Anti-attack Control, ACL, 802.1X Authentication, Port Alarm, Power Supply Alarm, E-mail Alarm, Storm Suppression, SSHD Configuration, Telnet Configuration, HTTPS Configuration
Switch Function	802.1Q Vlan, Static/Dynamic Port Aggregation, Bandwidth Management, Flow Control, Port Isolation
Unicast / Multicast	Static Multicast, GMRP, IGMP-Snooping
Redundancy Protocol	SW-Ring, STP/RSTP/MSTP
Fault Diagnosis	Ping, Traceroute, Port Loopback
Time Management	SNTP
Interface	Copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode Self-adaption, MDI/MDI-X Autotunning SFP slot: 1000Base-SFP 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 carrying capacity 1A@24VDC or 0.5A@120VAC
LED Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator

Switch Property	Transmission mode: store and forward MAC address: 16K Packet buffer size: 12Mbit Backplane bandwidth: 56G Switch time delay: < 10µs
Power Requirement	12~48VDC, 4-pin 7.62mm pitch terminal blocks dual power supply redundancy, reverse polarity protection, nonpolarity

Power Consumption	Model	No-load (@48VDC)	Full-load (@48VDC)
	IES7120G-4GS	11.04W	14.88W
	IES7120G-16GT	11.04W	13.68W

Environmental Limit	Operating temperature range: -40~75°C Storage temperature range: -40~85°C Relative humidity: 5%～95%（no condensation）
Physical Characteristic	Housing: IP40 protection, high-intensity corrugated metal Installation: DIN-Rail mounting Dimension (W x H x D): 70mm×160mm×130mm Weight: ≤1.08kg
Industrial Standard	IEC 61000-4-2 (ESD), Level 3 IEC 61000-4-4 (EFT), Level 3 IEC 61000-4-5 (Surge), Level 3 Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Certification	CE, FCC, RoHS, UL61010
Warranty	5 years

Ordering Information

Available Models	Gigabit SFP Slot	Gigabit Copper Port	Power Supply Range
IES7120G-4GS	4	16	12~48VDC dual power supply
IES7120G-16GT	—	16	