



## IES3000-8GT4GS-2BP-2P220

#### **Rack Mounting**

12-Port Gigabit Managed Industrial Bypass Ethernet Switch

- Support 8 Gigabit copper ports, 4 Gigabit SFP slots and 2 Bypass
- Support ERPS, RSTP and STP Ring Protocol
- Support SNMP and IPv6 management
- Support dual power supply, input voltage: 220VAC (100~240VAC).
- Support -40~75°C wide operating temperature range













#### Introduction

IES3000-8GT4GS-2BP-2P220 is 12-port Gigabit managed industrial Bypass Ethernet switch. This product provides Gigabit copper ports, Gigabit SFP slots and 2 Bypass. It adopts rack mounting which can meet the requirements of different scenes.

The network management system supports a variety of network protocols and industry standards, such as ERPS, STP/RSTP/ MSTP Ring network protocols, 802.1Q VLAN, QoS function, IGMP snooping, LLDP, port aggregation, port mirroring, etc. IPv6 management is supported. It has complete management functions, supporting port configuration, port statistics, access control, 802.1x authentication, network diagnosis, rapid configuration, online upgrade, etc. CLI, WEB, Telnet, SNMP and other access methods are also supported. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

The device has two independent power supply circuits internally which can ensure the normal operation of the device when one power supply fails. The design of DIP switch could implement 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. 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.

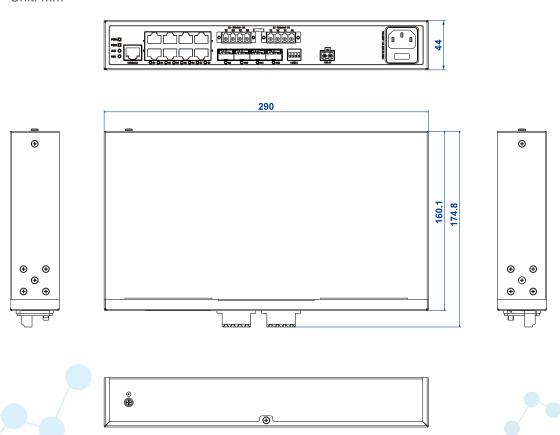
#### **Features and Benefits**

- SNMPv1/v2c/v3 is used for network management of various levels
- QoS supports real-time traffic classification and priority setting
- LLDP can achieve automatic topology discovery, which is convenient for visual management
- DHCP server can be used for distributing IP address with different strategies
- DHCP Snooping can ensure DHCP client gets IP address from legal DHCP server
- DHCP relay function can realize IP address, gateway, DNS configuration cross network segment
- File management is convenient for the device rapid configuration and online upgrading
- Log management records the information of booting, operation and connection
- Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status
- Port statistics can be used for the port real time traffic statistics
- Support Console/Telnet/WEB management method
- User password can conduct user hierarchical management to improve the device management security

- ACL and 802.1X authentication could strength the flexibility and security of network
- Support NAS network access service and provide security assurance for multiple services
- MEP function can determine the scope and boundary of maintenance domain
- Relay alarm is convenient for troubleshooting of construction site
- Storm suppression can restrain broadcast, unknown multicast and unicast
- TELNET configuration and HTTPS configuration guarantee secure access to data
- Static Aggregation and LACP can increase network bandwidth and enhance the reliability of network connection to achieve the best bandwidth utilization
- IGMP Snooping and static multicast can be used for filtering multicast traffic to save the network bandwidth
- ERPS and STP/ RSTP/ MSTP could implement network redundancy and construct reliable networks, thus preventing network storm and broadcast storm
- Loop protection could efficiently eliminate the influence caused by port loopback
- IPv6 can solve the problems such as the number of network address resources and the obstacles of connecting various access devices to the Internet
- Network diagnosis and troubleshooting could be conducted via Ping and cable detection and port mirroring

### **Dimension**

Unit: mm



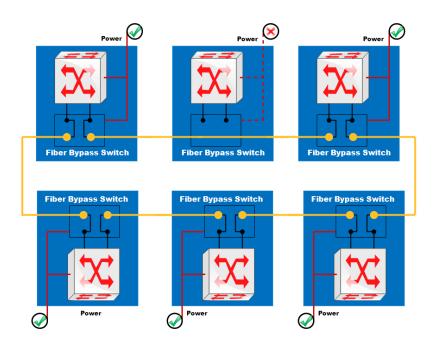
# Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3z for 1000Base-T IEEE 802.3z for 1000Base-X G.8032 standard for ERPS 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 802.1D 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, QoS, LLDP, DHCP Server, DHCP Snooping, DHCP relay, File Management, Log Management, Port Statistics and MEP		
Security	Classification of User Permissions, ACL, 802.1X Authentication, Port Alarm, Storm Suppression, SSH Configuration, Telnet Configuration, HTTPS Configuration, NAS, Radius Server Authentication, TACACS+ Server Authentication, Loop Protection		
Switch Function	802.1Q VLAN, Static/Dynamic Port Aggregation, Bandwidth Management, Flow Control		
Unicast / Multicast	IGMP Snooping, Unicast MAC		
Redundancy Technology	Ring, ERPS, STP/RSTP/MSTP		
Troubleshooting	Ping, Cable Detection, port Mirroring		
Time Management	NTP, Time Zone Configuration		
Interface	Copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning SFP slot: 1000Base-X, SFP slot Flange interface: 2*4LC-LC, single-mode fiber, supporting Bypass function Console port: CLI command line management port(RS-232), RJ45 Alarm port: 2-pin 5.08mm pitch terminal blocks, support 2 relay alarm		

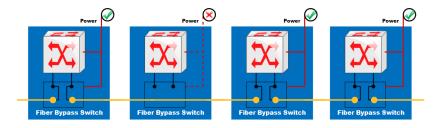
	outputs, current carrying capacity is 0.3A@125VAC or 1A@30VDC			
Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator			
Switch Property	Transmission mode: store and forward MAC address: 8K Packet buffer size: 4Mbit Backplane bandwidth: 30G Switch time delay: <10µs			
Power Supply	(100~240VAC) 220VAC power supply: Built-in dual power supply redundancy Support built-in 3.0A overcurrent protection			
Power Consumption	No-load: 5.9W@220VAC Full-load: 11.6W@220VAC			
Working Environment	Operating temperature: -40~75°C  Storage temperature: -40~85°C  Relative humidity: 5%∼95% (no condensation)			
Physical Characteristic	Housing: IP40 protection, metal Installation: rack mounting Weight: 1.6kg Dimension (W x H x D): 290mm×44mm×174.8mm			
Industrial Standard	IEC 61000-3-2 (ESD, electrostatic discharge), Level 4  • Air discharge: ±8kV  • Contact discharge: ±6kV  IEC 61000-3-4 (EFT, electrical fast transient), Level 4  • Power supply: ±2kV  • Signal: ±1kV  IEC61000-4-5 (Surge), Level 3  • Power supply: differential mode±1kV, common mode±2kV  • Signal: differential mode±1kV, common mode±2kV  Shock: IEC 60068- 2- 27  Free fall: IEC 60068- 2- 32  Vibration: IEC 60068- 2- 6			

# **Typical Application**

Ring topology



Bus topology



## **Ordering Information**

Available Models	Gigabit Copper Port	Gigabit SFP	Fiber Port Bypass	Power Supply
IES3000-8GT4GS-2BP-2P220	8	4	2	220VAC dual power supply



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