IES3000 Series

Rack Mounting

Industrial 12-port Full Gigabit Managed Bypass Ethernet Switch

- Support 8 gigabit copper ports (Optional PoE), 4 gigabit SFP slots and 2 Bypass

- Support ERPS, RSTP and STP ring network protocol

- Support SW-Ring patented technology, automatic recovery time of network failure < 20ms

- Support SNMP and IPv6 management

- Support dual power supply redundancy, optional AC/DC power supply

- Support -40~75℃ wide operating temperature range

Introduction

IES3000 series is industrial 12-port full gigabit managed Bypass Ethernet switch. This product provides gigabit copper port (optional PoE), gigabit SFP slot and 2 Bypass. It adopts rack mounting to meet the requirements of different application scenes.

Network management system supports various network protocols and industrial standards, such as ERPS, STP/RSTP/MSTP ring network protocol, 802.1Q VLAN, QoS, IGMP Static Multicast, LLDP, Port Trunking, Port Mirroring, IPv6 Management, 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.

There are two independent power supply circuits inside the device, which can ensure that it can operate normally when one fails. DIP switch can achieve restoring factory defaults setting. 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, safe 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
- SYSLOG supports transmitting system log information to remote server
- Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status
- Port statistics can be used for port real-time traffic statistics
- Support Console/Telnet/WEB management method
- User password can conduct user hierarchical management to improve the device management security
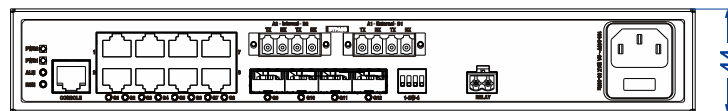
- ⊙ Anti-attack control, ACL and 802.1X authentication can enhance the network flexibility and security
- ⊙ Relay alarm is convenient for troubleshooting of construction site
- ⊙ Storm suppression can restrain the broadcast, unknown multicast and unknown unicast
- ⊙ TELNET and HTTPS configuration can guarantee the data access security
- ⊙ 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 to save Vlan resource
- ⊙ ERPS and STP/RSTP/MSTP can achieve network redundancy, preventing network storm and broadcast storm
- ⊙ IPV6 can solve the problem of limited internet address resources and the obstacle of multiple device linking to the internet
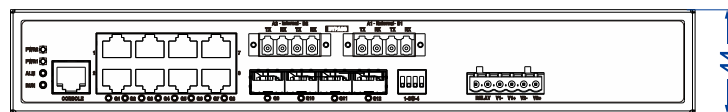- ⊙ Network Diagnosis and Troubleshooting can be conducted via Ping, Traceroute and Port Loopback
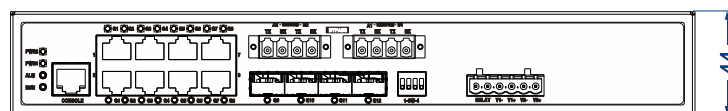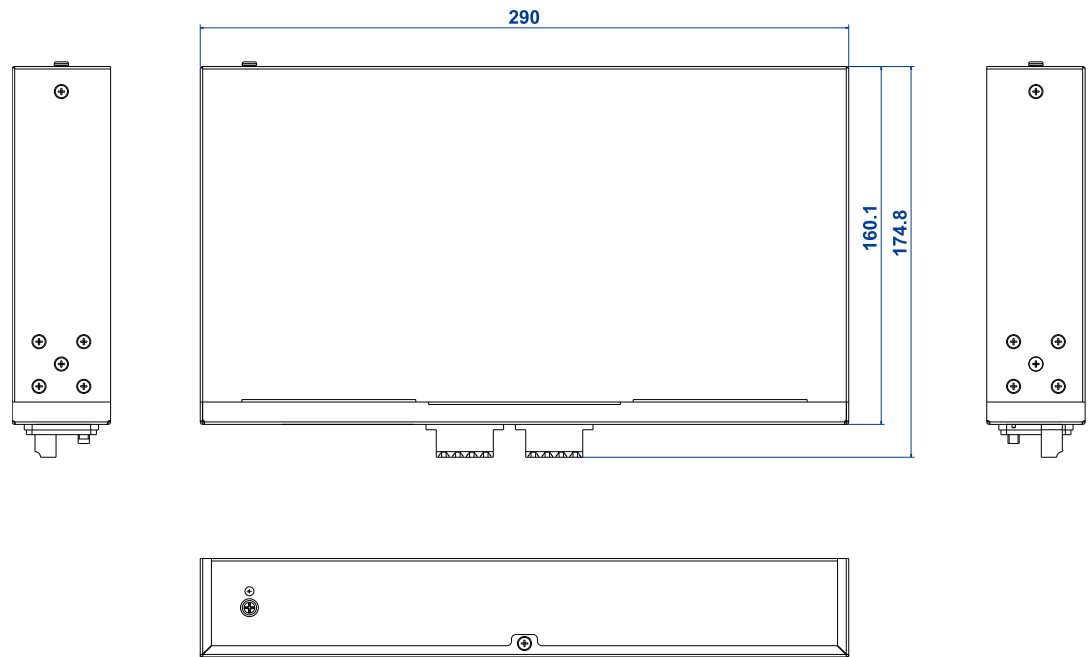
Dimension

Unit:mm
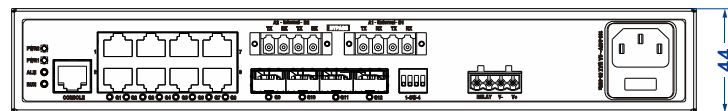
IES3000-8GT4GS-2BP-P48P220

IES3000-8GT4GS-2BP-2P220

IES3000-8GT4GS-2BP-2P48

IES3000-8GP4GS-2BP-2P48-240W

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 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 802.1p for Class of Service IEEE 802.1X for 802.1X authentication IEEE 802.1AB for LLDP IEEE 802.3ad for LACP IEEE 802.3af for PoE IEEE 802.3at for PoE+
Management	SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, Port Mirroring, QoS, LLDP, DHCP Server, DHCP Client, File Management, Log Management, Port Statistics, SYSLOG management
Security	Classification of User Permissions, Anti-attack Control, ACL, 802.1X Authentication, Port Alarm, Power Supply 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	Ring, STP/RSTP/MSTP
Fault Diagnosis	Ping, Traceroute, Port Loopback
Time Management	SNTP
PoE	Maximum power of PoE port: 30W PoE power supply pin: V+, V+, V- and V- correspond to 1, 2, 3 and 6
Interface	Copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning SFP slot: 1000Base-SFP Flange interface: 2*4LC-LC, single mode fiber, supports Bypass Console port: CLI command line management port (RS-232), RJ45 Alarm port: 2-pin 5.08mm pitch terminal blocks, support 1 relay alarm output, current carrying capacity is 0.3A/125VAC or 1A/30VDC
LED 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: 24G Switch time delay: < 10µs
Power Requirement	Power supply range: ● AC power supply product: 220VAC (100~24VAC); ● DC power supply product: 48VDC (12~48VDC); ● PoE product: 48VDC Built-in dual power supply redundancy support 3.0A over-current protection
Power consumption	IES3000-8GT4GS-2BP-2P220: ● No-load: 5.9W@220VAC ● Full-load: 11.6W@220VAC
Environmental Limit	Operating temperature: -40~75℃ Storage temperature: -40~85℃ 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	IEC61000-4-2 (ESD, electrostatic discharge), Level 3
	● Air discharge: ±8kV
	● Contact discharge: ±6kV
	IEC61000-4-4 (EFT, electrical fast transient), Level 3
	● 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

Certification	CE, FCC, RoHS

Typical application

●   Ring topology
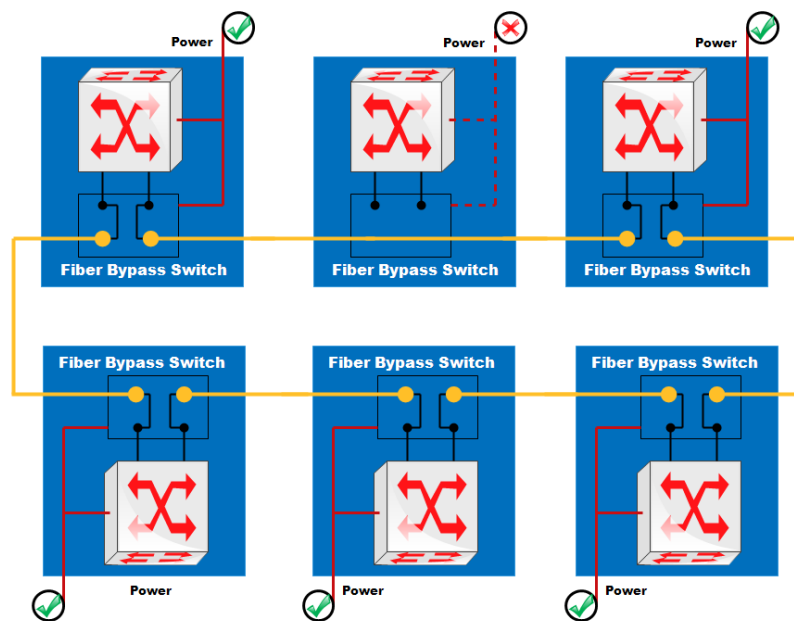
- Bus topology
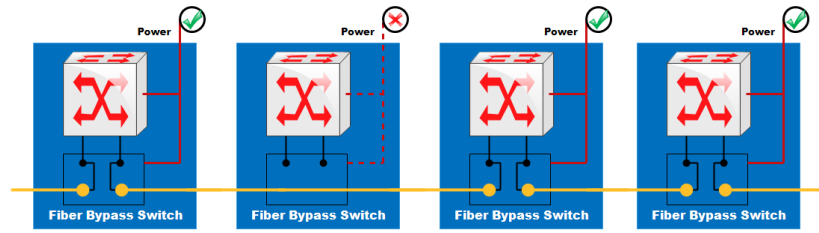
Ordering Information

Model	Gigabit Copper Port	Gigabit POE Copper Port	Gigabit SFP	Fiber Port Bypass	Power Supply
IES3000-8GP4GS-2BP -2P48-240W	-	8	4	2	48VDC
IES3000-8GT4GS-2BP -P48P220	8	-	4	2	48VDC(12~48 VDC), 220VAC(100~ 240VAC)
IES3000-8GT4GS-2BP -2P48	8	-	4	2	48VDC(12~48 VDC)
IES3000-8GT4GS-2BP -2P220	8	-	4	2	220VAC(100~ 240VAC)

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