





## IES6312-8GT4GS-2P48

**DIN-Rail or Wall Mounting** 

12-port Full Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 4 gigabit fiber ports (SFP slot) and 8 gigabit copper ports
- Adopt SW-Ring patent technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms</li>
- Support dual 12~48VDC power input
- Support -40~75<sup>°</sup>C wide operating temperature range













#### Introduction

IES6312-8GT4GS-2P48 is 12-port full gigabit layer 2 managed industrial Ethernet switch. This device provides 8 gigabit copper ports and 4 gigabit SFP slots. It supports dual power supply 12~48VDC, and adopt DIN-Rail mounting or wall mounting, which can meet the requirements of different scenes.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 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. Moreover, it supports CLI, WEB, Telnet, SNMP and other access modes. It can provide users with good experience via friendly design of network management system interface, simple and convenient operation.

The input DC power supply is two independent power supply circuits which can ensure the normal operation of the device when one power supply fails. DIP switch can restore factory defaults. When DC power supply or port has link failure, ALM 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 railway transportation, smart city, safe city, new energy, smart grid, aerospace, intelligent manufacturing, military project and other industrial fields.

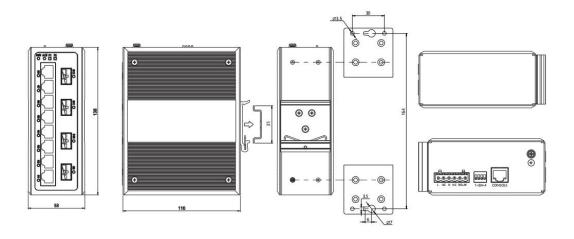
## **Features and Benefits**

- 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 DHCP client could be used for allocating IP address of different strategies
- File management is convenient for rapid configuration and online upgrade of the device
- Log management records boot information, operation information and connection information
- Bandwidth management and flow control 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
- User password can conduct user hierarchical management to improve the device administrative security
- Radius server authentication, anti-attack control, ACL and 802.1X authentication could strength the flexibility and security of network
- Relay alarm is convenient for troubleshooting of construction site
- Storm suppression can restrain broadcast, unknown multicast and unknown unicast
- SSHD configuration could encrypt transmitted data, prevent DNS and IP spoofing
- TELNET configuration and HTTPS configuration could ensure the access security of data
- VLAN can simplify the network planning
- Port trunking and LACP can increase network bandwidth and the reliability of network connection to achieve optimal bandwidth utilization
- IGMP-snooping and static multicast can be used for filtering multicast traffic to save the network bandwidth
- Port isolation could achieve port isolation in the same VLAN and save VLAN resources
- SW-Ring, STP/RSTP and ERPS can achieve network redundancy, preventing network storm
- Ping, Traceroute and Port Loopback could achieve network diagnosis and troubleshooting
- Optical fiber diagnosis and troubleshooting can be conducted via SFP DDM
- Support Syslog on the web management page
- GVRP configuration can be used for registering and logout of VLAN property

### **Dimension**

Unit:mm



# **Specification**

Security

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 Standard & Protocol IEEE 802.1s for Multiple Spanning Tree Protocol ITU-T G.8032 for ERPS 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, Q-in-Q SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, Port Management Mirroring, ToS, QoS, LLDP, DHCP Server, DHCP Client, File Management,

Classification of User Permissions, Radius server authentication, anti-attack control, ACL, 802.1X Authentication, Port Alarm, DC Power

Supply Alarm, Storm Suppression, SSHD Configuration, Telnet

Configuration, HTTPS Configuration, DDM SFP

Log Management, Port Statistics

Switch Function	802.1Q Vlan, Static/Dynamic Port Aggregation, Bandwidth Management, Flow Control, Port Isolation
Unicast / Multicast	GVRP, Static Multicast, GMRP, IGMP-Snooping
Redundancy Protocol	SW-Ring, STP/RSTP, BPDU guard, ERPS
Troubleshooting	Ping, Traceroute, port loopback
Time Management	NTP/SNTP
Interface	Gigabit copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning SFP slot: 1000Base-SFP, LC Console port: CLI command line management port (RS-232), RJ45 Alarm port: 6-pin 5.08mm pitch terminal blocks(relay occupies 2 pins), support 1 relay alarm output, the current load capability is 1A@30VDC or 0.3A@125VAC
LED Indicator	Running Indicator, Alarm Indicator, Port Indicator, Power Supply Indicator
Switch Property	Transmission mode: store and forward MAC address: 8K Packet buffer size: 4Mbit Backplane bandwidth: 24G Switch time delay: <10µs
Power Requirement	<ul> <li>Power supply range: 12~48VDC</li> <li>Connection mode: 6-pin 5.08mm pitch terminal blocks (power supply occupies 4 pins)</li> <li>Power supply quantity: dual power supply redundant backup</li> <li>Connection protection: non-polarity</li> <li>Over-current protection: 3A</li> </ul>
Power Requirement  Power Consumption	<ul> <li>Connection mode: 6-pin 5.08mm pitch terminal blocks (power supply occupies 4 pins)</li> <li>Power supply quantity: dual power supply redundant backup</li> <li>Connection protection: non-polarity</li> </ul>
	<ul> <li>Connection mode: 6-pin 5.08mm pitch terminal blocks (power supply occupies 4 pins)</li> <li>Power supply quantity: dual power supply redundant backup</li> <li>Connection protection: non-polarity</li> <li>Over-current protection: 3A</li> </ul> Model No-load Full-load

Weight: ≤740g

Dimension (W x H x D): 53mm×138mm×110mm

EMC: EN55032/24 EMI: FCC Class A

EMS:

IEC 61000-4-2 (ESD), Level 3
IEC 61000-4-3 (RS), Level 3
IEC 61000-4-4 (EFT), Level 3
IEC 61000-4-5 (Surge), Level 3

Industrial Standard

IEC 61000-4-6(CS), Level 3

IEC 61000-4-8

IEC 61000-4-11
Rail traffic: EN50121-4
Shock: IEC 60068-2-27
Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Certification CE, FCC, RoHS, UL61010

MTBF Time 538,649 hrs

Warranty 5 years



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