



## IES6306 Series

DIN-Rail Mounting

6-Port Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 2 2.5G Ethernet SFP fiber ports and 4 Gigabit copper ports (optional PoE)
- Adopt Ring patented technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms
- Support multiple network protocols and industrial standard, such as STP/RSTP/MSTP, ERPS, PoE, DHCP, VLAN, QoS function, IGMP Snooping function, LLDP etc.
- Support dual power redundancy, input voltage 48VDC PoE or 12~48VDC
- The maximum output power of a PoE port is 30W, and that of the whole device is 120W
- Support -40~75°C wide operating temperature range



Industrial Grade



RPS



## Introduction

IES6306 Series are 6-port Gigabit layer 2 managed industrial Ethernet switches. This series have two products and provide 4 Gigabit copper ports, 4 Gigabit PoE copper ports and 2 2.5G SFP slots, and it adopts DIN-Rail mounting which can meet the requirements of different scenes.

Network management system supports various network protocols and industrial standards, such as Ring, STP/ RSTP/MSTP, ERPS, DHCP, VLAN, QoS function, IGMP Snooping, LLDP, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Access Control, Network Diagnosis, Online Upgrading and so on, and supports CLI, WEB, Telnet, SSH, 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 product provides 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 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. 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 AP coverage, railway transportation, smart city, safe city, new energy, smart grid, aerospace, intelligent manufacturing, military project and other industrial fields.

## Features and Benefits

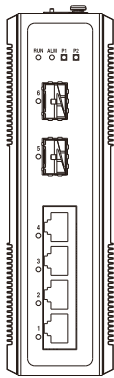
- ⦿ SNMPv1/v2c/v3 is used for network management of various levels
- ⦿ RMON can be used for efficient and flexible network monitoring
- ⦿ QoS supports real-time traffic classification and priority setting
- ⦿ LLDP can achieve automatic topology discovery, which is convenient for visual management
- ⦿ 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
- ⦿ User privilege classification configuration can set user privilege level
- ⦿ SSH configuration and HTTPS configuration can improve device's management security and guarantee data access security
- ⦿ Support NAS network access service and provide security assurance for multiple

services

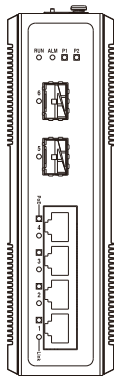
- ⦿ IPMC file configuration can deploy access control on IP multicast flow
- ⦿ MEP function can determine the scope and boundary of maintenance domain
- ⦿ Ring and STP/RSTP/MSTP can achieve network redundancy, preventing network storm
- ⦿ EPRS function can realize link backup and improve the reliability of network
- ⦿ Loop protection could efficiently eliminate the influence caused by port loopback
- ⦿ 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
- ⦿ Static Aggregation and LACP can increase network bandwidth and enhance the reliability of network connection to achieve the best bandwidth utilization
- ⦿ IGMP Snooping can be used for filtering multicast traffic to save the network bandwidth
- ⦿ Network diagnosis and troubleshooting could be conducted via Ping and cable detection
- ⦿ Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- ⦿ PoE could power device over Ethernet, thus decreasing the cable connection of powered devices

## Dimension

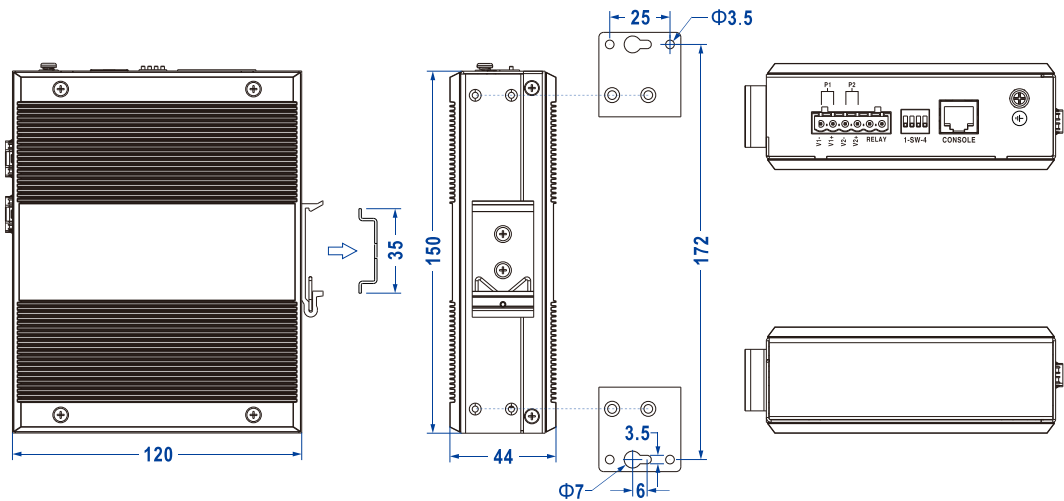
Unit: mm



IES6306-4GT2HS-2P48



IES6306-4GP2HS-2P48-120W



## 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 ITU-T G.8032 for ERPS IEEE 802.1Q for VLAN IEEE 802.1p for CoS IEEE 802.1AB for LLDP IEEE 802.3ad for LACP IEEE 802.3af for PoE IEEE 802.3at for PoE+
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Management

SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, Port Mirroring, QoS, LLDP, DHCP Server, DHCP Snooping, DHCP relay, user

password, login method, File Management, Log Management, Port Statistics, PoE

Security	User Privilege Classification, Authentication method Configuration, SSH Configuration, HTTPS Configuration, Access Management, SNMP, RMON, NAS, Radius Server Authentication, TACACS + Server Authentication, ACL, Port Alarm, DC Power Supply Alarm, Loop Protection
Switch Function	802.1Q VLAN, Static Aggregation, LACP
Unicast / Multicast	IGMP Snooping
Redundancy Technology	Ring, STP/RSTP/MSTP, ERPS
Troubleshooting	Ping, Cable Detection
Time Management	NTP, Time Zone Configuration
Interface	<p>Gigabit copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex, MDI/MDI-X Autotuning;</p> <p>Gigabit PoE copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex, MDI/MDI-X Autotuning; the single port supports up to 30W PoE output power. PoE power supply pin: V+, V+, V-, V- correspond to Pin 1, 2, 3, 6</p> <p>2.5G SFP slot: 100/1000 Base-X self-adaption or 100/1000/2.5G Base-X forced mode, SFP slot</p> <p>Console port: CLI command line management port(RS-232), RJ45</p> <p>Alarm port: 6-Pin 5.08mm pitch terminal blocks, relay occupies 2 pins and 1 relay alarm information output is supported, the current load capability is 1A@30VDC or 0.3A@125VAC</p>
Indicator	Running Indicator, Alarm Indicator, Power Supply Indicator, Interface Indicator, PoE State Indicator
Switch Property	<p>Transmission mode: store and forward</p> <p>MAC address: 8K</p> <p>Packet buffer size: 4Mbit</p> <p>Backplane bandwidth: 30G</p> <p>Switch time delay: &lt;10μs</p>
Power Supply	IES6306-4GT2HS-2P48:

- Power input: 12~48VDC
- Connection method: 6- Pin 5.08mm pitch terminal blocks (includes 4-pin power supply)
- Power supply quantity: dual power supply redundancy backup
- Connection protection: anti-reverse connection
- Overcurrent protection: 5A

IES6306-4GP2HS-2P48-120W:

- Voltage range without using PoE function: 12~48VDC
- Rated voltage: 48VDC
- Maximum voltage range: 44VDC~55VDC
- Connection method: 6-Pin 5.08mm pitch terminal blocks (includes 4-pin power supply)
- Power supply quantity: dual power supply redundancy backup
- Connection protection: anti-reverse connection
- Overcurrent protection: 5A

Power Consumption	Model	No-load (@48VDC)	Full-load (@48VDC)
	IES6306-4GT2HS-2P48	7.5W	4.8W
	IES6306-4GP2HS-2P48-120W	9.6W	≤130W

#### 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: DIN-Rail mounting  
Dimension (W x H x D): 44mm×150mm×120mm

#### Industrial Standard

IEC 6100042 (ESD, electrostatic discharge), Level 3

- Air discharge: ±8kV
- Contact discharge: ±6kV

IEC 6100044 (EFT, electrical fast transient pulses), Level 3

- Power supply: ±2kV
- Relay: ±2kV
- Signal: ±1kV

IEC 61000-4-5 (Surge), Level 3

- Power supply: differential mode±1kV, common mode±2kV
- Relay: 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

MTBF	200, 000 hours
Authentication	CE, FCC, RoHS
Warranty	5 years



## Ordering Information

Available Models	Gigabit Copper Port	Gigabit PoE Copper Port	2.5G SFP Slot	Power Supply
IES6306-4GT2HS-2P48	4	—	2	12~48VDC, dual power supply
IES6306-4GP2HS-2P48-120W	—	4	2	48VDC, dual power supply



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