

## IES6300 Series

DIN-Rail or Wall Mounting

12-Port Layer 2+ Managed Industrial Gigabit Ethernet Switch (Optional PoE)

- Support 2 100M/1G/2.5G SFP slots, 2 100M/1G SFP slots, 8 Gigabit copper ports (optional PoE), 2DI and 2DO (optional)
- Adopt patented SW-Ring technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms
- Support multiple network protocols and industry standards, such as STP/RSTP/MSTP, ERPS, PTP, PoE, DHCP, VLAN, QoS, IGMP Snooping, LLDP, ACL and SNMP.
- Support 3 optional redundant power supplies: 24VDC PoE, 48VDC PoE or 12~48VDC non-PoE
- Support -40~75°C wide operating temperature range



Industrial Grade



## Introduction

IES6300 Series are 12-port layer 2+ managed industrial Gigabit Ethernet switches with optional PoE. PoE power supply conforms to IEEE 802.3af/at protocol standard. This series provide 6 products and support a variety of interfaces including Gigabit copper ports, Gigabit PoE copper ports, 100M SFP slots, Gigabit SFP slots, 2.5G SFP slots and I/O ports. They adopt DIN-Rail mounting or wall mounting to meet the requirements of different application scenes.

The network management system supports a variety of network protocols and industry standards, such as SW-Ring, STP/RSTP/MSTP, ERPS,PTP, DHCP Server/Snooping/Relay, VLAN, QoS, IGMP Snooping, LLDP,Static Routing, Port Trunking and Port Mirroring. It possesses complete management functions and supports Port Configuration, NAS, ACL, Network Diagnosis, Online Upgrade, etc. CLI, WEB, TELNET, SSH, SNMP and other access methods can be supported. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

The power supply has 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 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, intelligent manufacturing and other industrial fields.

## Features and Benefits

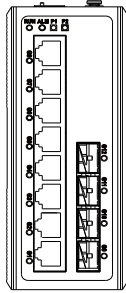
- ① SNMPv1/v2c/v3 is used for network management of various levels
- ① RMON can be used for efficient and flexible network monitoring
- ① QoS supports real-time traffic classification and priority setting
- ① LLDP can achieve automatic topology discovery, which is convenient for visual management
- ① DHCP server and DHCP client could be used for allocating IP address of different strategies
- ① DHCP snooping can ensure DHCP client gets IP address from legal DHCP server
- ① DHCP relay function can realize IP address, gateway, DNS configuration cross network segment
- ① File management is convenient for the device rapid configuration and online upgrading
- ① User privilege classification configuration can set user privilege level
- ① 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
- ⦿ MEP function can determine the scope and boundary of maintenance domain
- ⦿ SW-Ring and STP/RSTP/MSTP can achieve network redundancy, preventing network storm
- ⦿ EPRS function can realize link backup and improve the reliability of network
- ⦿ 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
- ⦿ Port trunking and LACP can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- ⦿ Support static routing function which can achieve Layer 2+
- ⦿ IGMP snooping can be used for filtering multicast traffic to save the network bandwidth
- ⦿ PoE could power device over Ethernet, thus decreasing the cable connection of powered devices
- ⦿ Support I/O port input and output, I/O status alarm and control remote device
- ⦿ Support DDM (digital diagnostic monitoring) function, which can monitor the optical power, temperature and other real-time parameters of SFP fiber module with DDM function, facilitating the link default diagnosis of optical fiber
- ⦿ 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

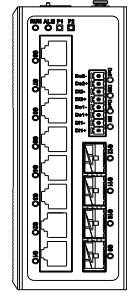
## Dimension

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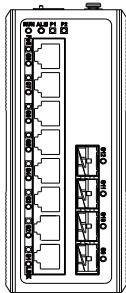
Unit: mm



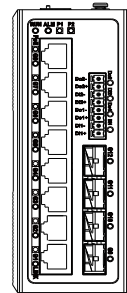
IES6300-8GT2GS2HS-2P48



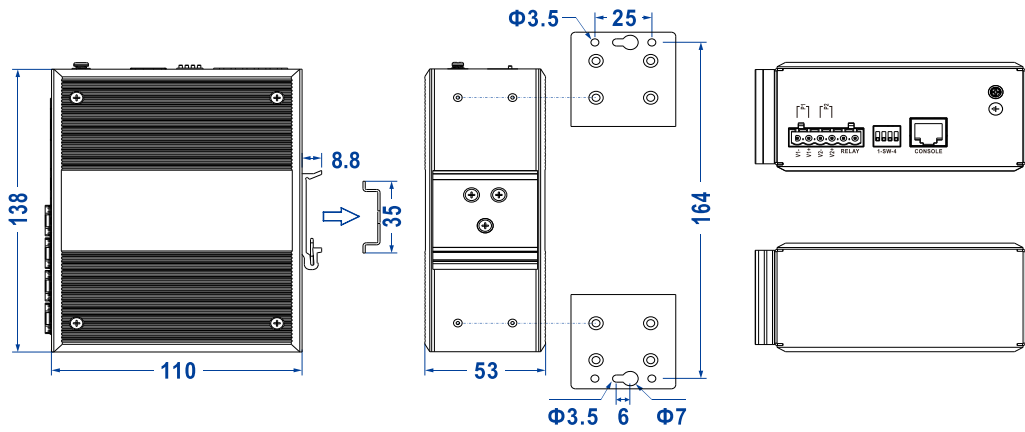
IES6300-8GT2GS2HS-2DI2DO-2P48



IES6300-8GP2GS2HS-2P24-120W  
IES6300-8GP2GS2HS-2P48-240W



IES6300-8GP2GS2HS-2DI2DO-2P24-120W  
IES6300-8GP2GS2HS-2DI2DO-2P48-240W



## Specification

<b>Standard &amp; Protocol</b>	<p>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 1588 for PTP                  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+</p>
<b>Management</b>	<p>SNMP v1/v2c/v3 Centralized Management of Equipment, QoS, PoE, DHCP Server, DHCP Snooping, DHCP Relay, Static MAC Address, LLDP, Storm Suppression, User Password, Login Method, File Management, Log Management, Port Statistics</p>
<b>Security</b>	<p>User Privilege Classification, Authentication Method Configuration, SSH Configuration, HTTPS Configuration, Access Control, SNMP, RMON, Port Limit Control, Port Security, NAS, ACL, Ethernet Services, RADIUS Server Authentication, TACACS + Server Authentication, Port Alarm, DC Power Supply Alarm, IO Alarm, Loop Protection</p>
<b>Switch Function</b>	<p>802.1Q VLAN, Static Aggregation, LACP</p>
<b>Unicast / Multicast</b>	<p>IGMP Snooping, Unicast MAC</p>
<b>Redundancy Technology</b>	<p>SW-Ring, STP/RSTP/MSTP, ERPS</p>
<b>Troubleshooting</b>	<p>Ping, Cable Detection, DDM, Port Mirroring</p>
<b>Layer 3 function</b>	<p>Static routing(IPv4/IPv6)                  Max. 8 IP interfaces                  Max. 32 routing entries</p>
<b>Time Management</b>	<p>NTP, Time Zone Configuration, PTP</p>

<p>PoE (optional)</p>	<p>The maximum power of PoE port: 30W The power supply pin of PoE: V+, V+, V-, V- correspond to Pin 1, 2, 3, 6</p>
<p>Interface</p>	<p>Gigabit copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotuning, optional PoE Gigabit SFP Slot: 100/1000Base-X self-adaption or forced mode, SFP slot 2.5G SFP Slot: 100/1000/2.5GBase-X self-adaption or forced mode, SFP slot I/O port (optional): Support 2 inputs and 2 outputs, 8-pin 3.81mm pitch terminal blocks, support dry contact input, relay-type output Console port: CLI command line management port(RS-232), RJ45 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>
<p>Indicator</p>	<p>Running indicator, alarm indicator, power supply indicator, interface indicator, PoE indicator (optional), I/O output indicator (optional), I/O input indicator (optional)</p>
<p>Switch Property</p>	<p>Transmission mode: store and forward MAC address: 8K Packet buffer size: 4Mbit Backplane bandwidth: 30G Jumbo Frame Size: 10K Switch time delay: &lt;10μs</p>
<p>Power Supply</p>	<p>IES6300-8GT2GS2HS-2P48, IES6300-8GT2GS2HS-2DI2DO-2P48:</p> <ul style="list-style-type: none"> <li>● Voltage range: 12~48VDC</li> <li>● Connection method: 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply)</li> <li>● Power supply quantity: dual power supply redundancy backup</li> <li>● Connection protection: non-polarity</li> <li>● Overcurrent protection: 3A</li> </ul> <p>IES6300-8GP2GS2HS-2P24-120W, IES6300-8GP2GS2HS-2DI2DO-2P24-120W:</p> <ul style="list-style-type: none"> <li>● Power supply range: 24VDC PoE(12-48VDC)</li> <li>● Connection method: 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply)</li> <li>● Power supply quantity: dual power supply redundancy backup</li> </ul>

	<ul style="list-style-type: none"> <li>● Connection protection: anti-reverse connection</li> <li>● Overcurrent protection: 12A</li> </ul> <p>IES6300-8GP2GS2HS-2P48-240W, IES6300-8GP2GS2HS-2DI2DO-2P48-240W:</p> <ul style="list-style-type: none"> <li>● Power input: 48VDC PoE(44-55VDC)</li> <li>● Connection method: 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply)</li> <li>● Power supply quantity: dual power supply redundancy backup</li> <li>● Connection protection: anti-reverse connection</li> <li>● Overcurrent protection: 5A</li> </ul>
<b>Power Consumption</b>	<p>No-load: ≤ 5.76W@48VDC Full-load: ≤ 12W@48VDC (without PoE load) ≤ 132W@24VDC (with 120W PoE Load) ≤ 252W@48VDC (with 240W PoE Load)</p>
<b>Working Environment</b>	<p>Operating temperature: -40~75°C Storage temperature:-40~85°C Relative humidity: 5%~95% (no condensation)</p>
<b>Physical Characteristic</b>	<p>Housing: IP40 protection, metal Installation: DIN-Rail or wall mounting Weight: ≤ 0.78kg Dimension (W x H x D): 53mm×138mm×110mm</p>
<b>Industrial Standard</b>	<p>IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 IEC 61000-4-3 (RS, radiated immunity), Level 3 IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3 IEC 61000-4-5 (Surge), Level 3 IEC 61000-4-6 (conducted disturbances), Level 3 IEC 61000-4-8 (PFMT) IEC 61000-4-11 Safety: UL 60950-1, UL62368-1 Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6</p>
<b>Authentication</b>	CE, FCC, RoHS, UL61010, E-mark, IEC61850-3
<b>Warranty</b>	5 years

## Ordering Information

Available Models	Gigabit RJ45 LAN Port		SFP Slot		I/O	PoE Power	Power Supply
	Non-PoE	PoE	Gigabit	2.5G			
IES6300-8GT2GS2HS-2P48	8	—	2	2	—	—	12~48VDC
IES6300-8GT2GS2HS-2DI2DO-2P48	8	—	2	2	2	—	Redundant power supply
IES6300-8GP2GS2HS-2P24-120W	—	8	2	2	—	120W	24VDC
IES6300-8GP2GS2HS-2DI2DO-2P24-120W	—	8	2	2	2	120W	Redundant power supply
IES6300-8GP2GS2HS-2P48-240W	—	8	2	2	—	240W	48VDC
IES6300-8GP2GS2HS-2DI2DO-2P48-240W	—	8	2	2	2	240W	Redundant power supply



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