



## IES6300SL Series

DIN-Rail or Wall Mounting

6/12/20-Port Gigabit Layer 2 Managed Industrial Ethernet Switch (Optional PoE)

- Support 2 Gigabit SFP slots and 4 Gigabit copper ports (optional PoE), 4 Gigabit SFP slots and 8 Gigabit copper ports (optional PoE) or 4 Gigabit SFP slots and 16 Gigabit copper ports (optional PoE)
- Support MRP ring network, reconfiguration time < 200ms
- Adopt Ring patented technology, support single ring, coupling ring, chain, Dual-homing function
- Support multiple network protocols and industry standards, such as STP/RSTP/MSTP, ERPS, PoE, DHCP, VLAN, IGMP Snooping, LLDP, ACL and SNMP.
- In PoE products, the maximum power consumption of 6 ports is 120W, and that of 12/16 ports is 240W
- Support dual power redundancy. The input voltage of non-PoE products: 12~60VDC, and that of PoE products: 44~57VDC
- Support -40~75°C wide operating temperature range



Industrial Grade



RPS

# Introduction

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IES6300SL series products are 6/12/20-port Gigabit layer 2 managed industrial Ethernet switches with optional PoE. PoE power supply conforms to IEEE802.3af/at protocol standard. This series provides 6 products and supports Gigabit SFP slots, Gigabit copper ports, and Gigabit PoE copper ports. They adopt DIN-Rail or wall mounting to meet the requirements of different application scenes.

Network management system supports a variety of network protocols and industry standards, such as IPv4, IPv6, VLAN, STP/RSTP/MSTP, ERPS, PoE, DHCP, LLDP, IGMP Snooping, Modbus TCP monitoring, port trunking, port mirroring, etc. It has perfect management functions, supporting port configuration, port statistics, ACL, 802.1X authentication, network diagnosis, rapid configuration, online upgrade, etc. CLI, WEB, Telnet, SNMP, SSH, and other access methods can be supported. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

The input power supply is 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 and restart. When 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 smart city, safety city, intelligent manufacturing and other industrial fields.

## Features and Benefits

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- ⊙ 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
- ⊙ 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
- ⊙ DHCP Snooping can ensure DHCP client gets IP address from legal DHCP server
- ⊙ 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
- ⊙ VLAN is used for simplifying network planning
- ⊙ PoE could power device over Ethernet, thus decreasing the cable connection of

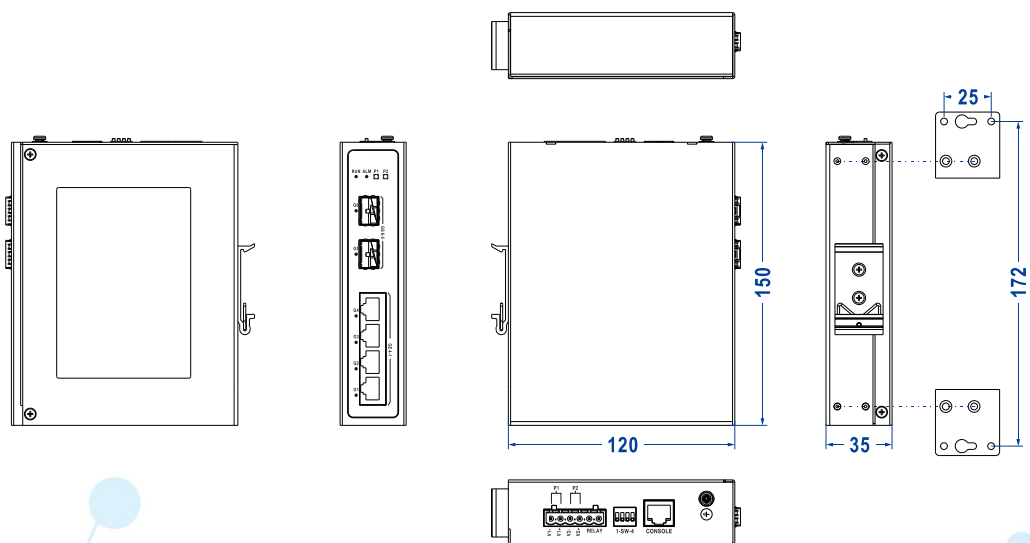
powered devices

- ⊙ File management is convenient for the device rapid configuration and online upgrading
- ⊙ Log management records Console log, RAM log and Flash log
- ⊙ Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status
- ⊙ Port statistics can be used for the port real time traffic statistics
- ⊙ User password can conduct user hierarchical management to improve the device management security
- ⊙ ACL can enhance network flexibility and security
- ⊙ Relay alarm is convenient for troubleshooting of construction site
- ⊙ Storm suppression can restrain broadcast, unknown multicast and unicast
- ⊙ Port Trunking can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- ⊙ IGMP Snooping and static multicast can be used to filter multicast data to save network bandwidth
- ⊙ Ring, MRP, STP/RSTP/MSTP can achieve network redundancy, preventing network storm
- ⊙ With high reliability and stability, ERPS could avoid broadcast storm caused by data loopback
- ⊙ Support Modbus TCP protocol which can monitor device information in real time.
- ⊙ Network diagnosis and troubleshooting could be conducted via Ping, Traceroute, Cable Diagnosis, SFP Digital Diagnosis

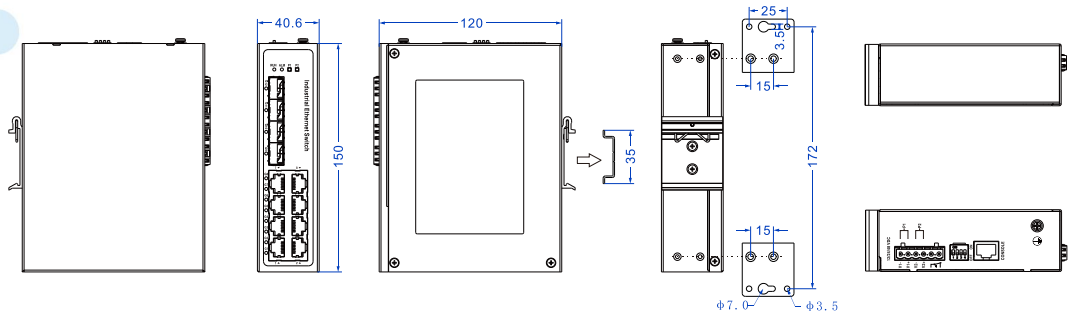
## Dimension

Unit: mm

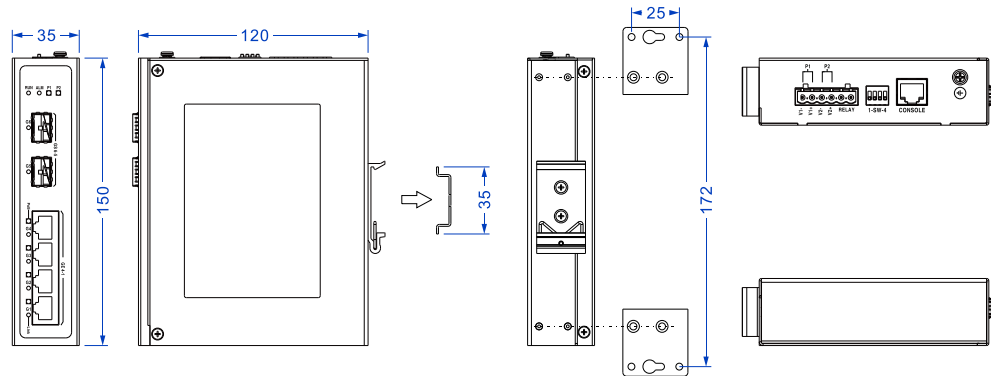
- IES6300SL-4GT2GS-2LV



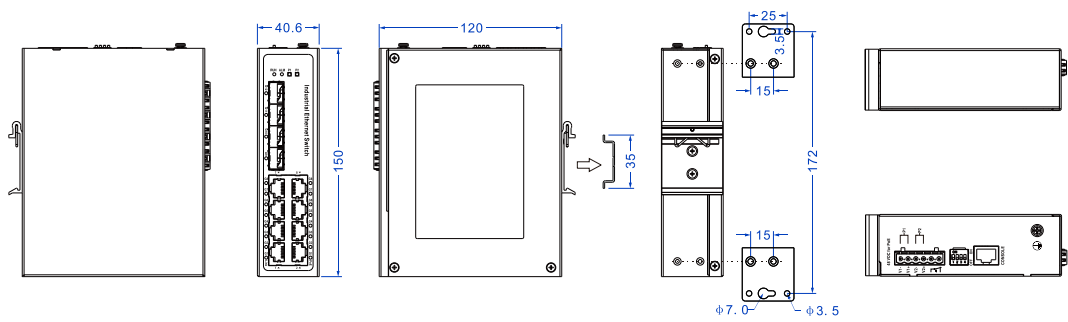
- IES6300SL-8GT4GS-2LV



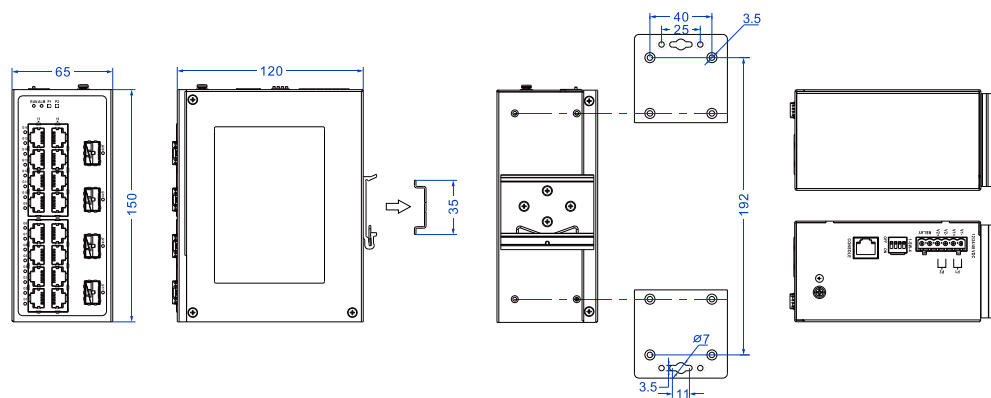
● IES6300SL-4GP2GS-2LV



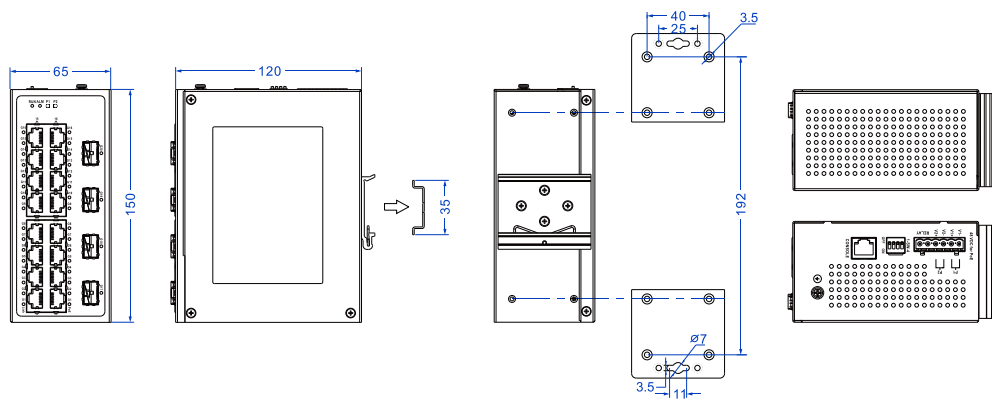
● IES6300SL-8GP4GS-2LV



● IES6300SL-16GT4GS-2LV



● IES6300SL-16GP4GS-2LV



## Specification

<p><b>Standard &amp; Protocol</b></p>	<ul style="list-style-type: none"> <li>IEEE 802.3 for 10Base-T</li> <li>IEEE 802.3u for 100Base-TX</li> <li>IEEE 802.3z for 1000Base-X</li> <li>IEEE 802.3ab for 1000Base-T</li> <li>IEEE 802.3x for Flow Control</li> <li>IEEE 802.1D for Spanning Tree Protocol</li> <li>IEEE 802.1w for Rapid Spanning Tree Protocol</li> <li>IEEE 802.1s for Multiple Spanning Tree Protocol</li> <li>IEEE 802.1Q for VLAN</li> <li>IEEE 802.1X for 802.1X Authentication</li> <li>IEEE 802.1AB for LLDP</li> <li>ITU-T G.8032 for ERPS</li> <li>IEEE 802.3ad for LACP</li> <li>IEEE 802.3af for PoE</li> <li>IEEE 802.3at for PoE+</li> </ul>
<p><b>Management</b></p>	<p>SNMP v1/v2c/v3, RMON, LLDP, PoE, DHCP Server, DHCP Snooping, port settings, dynamic/static MAC addresses, MAC/IPv4, IPv6, storm suppression, user passwords, file management, log management, port statistics, link flapping protection, Modbus TCP monitoring</p>
<p><b>Security</b></p>	<p>User privilege classification, ACL, SSH/HTTPS protocol authorization, link flapping protection, port loopback detection, access control, SNMP, RMON, Smart-Link, port alarm, power alarm, network load alarm</p>
<p><b>Switch Function</b></p>	<p>802.1Q VLAN, link aggregation, static aggregation, flow control, LACP</p>
<p><b>Unicast / Multicast</b></p>	<p>Multicast filtering, IGMP Snooping, MLD-Snooping</p>
<p><b>Redundancy Technology</b></p>	<p>Ring, MRP, STP/RSTP/MSTP, ERPS</p>

<b>Troubleshooting</b>	Log record, port mirroring, Ping, Traceroute, network cable diagnosis, SFP DDM
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<b>Time Management</b>	NTP, Time Zone Configuration
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<b>PoE (optional)</b>	The maximum power of PoE port: 30W The power supply pin of PoE: V+, V+, V-, V- correspond to Pin 1, 2, 3, 6
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<b>Interface</b>	Gigabit Copper Port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotuning, optional PoE Gigabit SFP: 1000Base-X SFP slot Console port: CLI management port (RS-232), RJ45 Alarm port: support 1 relay alarm output, and adopt 6-pin 5.08mm pitch terminal blocks (relay occupies 2 pins)
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<b>Indicator</b>	Running Indicator, Alarm Indicator, Power Supply Indicator, Interface Indicator, PoE Indicator
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<b>Switch property</b>	IES6300SL-4GT2GS-2LV, IES6300SL-4GP2GS-2LV <ul style="list-style-type: none"> <li>● Transmission mode: store and forward</li> <li>● MAC address: 8K</li> <li>● Cache: 4.1Mbit</li> <li>● Backplane bandwidth: 20Gbps</li> <li>● Switch time delay: &lt;10μs</li> </ul>
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<b>Switch property</b>	IES6300SL-8GT4GS-2LV, IES6300SL-8GP4GS-2LV, IES6300SL-16GT4GS-2LV, IES6300SL-16GP4GS-2LV <ul style="list-style-type: none"> <li>● Transmission mode: store and forward</li> <li>● MAC address: 8K</li> <li>● Cache: 4.1Mbit</li> <li>● Backplane bandwidth: 56Gbps</li> <li>● Switch time delay: &lt;10μs</li> </ul>
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<b>Power Supply</b>	IES6300SL-4GT2GS-2LV, IES6300SL-8GT4GS-2LV, IES6300SL-16GT4GS-2LV <ul style="list-style-type: none"> <li>● Power supply input: 12~60VDC, dual power supply redundancy</li> <li>● Connection method: adopt 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply)</li> <li>● Connection protection: support anti-reverse connection</li> </ul> IES6300SL-4GP2GS-2LV, IES6300SL-8GP4GS-2LV, IES6300SL-16GP4GS-2LV <ul style="list-style-type: none"> <li>● Power supply input: 44~57VDC, dual power supply redundancy</li> </ul>
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	<ul style="list-style-type: none"> <li>● Connection method: adopt 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply)</li> <li>● Connection protection: support anti-reverse connection</li> </ul>
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**Power Consumption**

IES6300SL-4GT2GS-2LV

- No-load: 3.6W@48VDC
- Full-load: 5.7W@48VDC (high temperature)

IES6300SL-8GT4GS-2LV

- No-load: 5.7W@48VDC
- Full-load: 10.1W@48VDC (high temperature)

IES6300SL-4GP2GS-2LV

- No-load: 3.3W@48VDC
- Full-load: 113.3W@48VDC

IES6300SL-8GP4GS-2LV

- No-load: 4.6W@48VDC
- Full-load: 229.3W@48VDC

IES6300SL-16GP4GS-2LV

- No-load: 7.5W@48VDC
- Full-load(without PoE): 16.1W@48VDC
- Full-load(PoE): 248.1W@48VDC

<b>Working Environment</b>	<p>Operating temperature: -40~75°C</p> <p>Storage temperature:-40~85°C</p> <p>Relative humidity: 5%~95% (no condensation)</p>
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**Mechanical Structure**

IES6300SL-4GT2GS-2LV

- Housing: IP40 protection, metal
- Installation: DIN-Rail or wall mounting
- Dimension (W x H x D): 35mm×150mm×120mm
- Weight: 0.631kg

IES6300SL-8GT4GS-2LV

- Housing: IP40 protection, metal
- Installation: DIN-Rail or wall mounting
- Dimension (W x H x D): 40.6mm×150mm×120mm
- Weight: 0.678kg

IES6300SL-4GP2GS-2LV

- Housing: IP40 protection, metal
- Installation: DIN-Rail or wall mounting
- Dimension (W x H x D): 35mm×150mm×120mm
- Weight: 0.647kg

IES6300SL-8GP4GS-2LV

- Housing: IP40 protection, metal
- Installation: DIN-Rail or wall mounting
- Dimension (W x H x D): 40.6mm×150mm×120mm
- Weight: 0.694kg

IES6300SL-16GT4GS-2LV

- Housing: IP40 protection, metal
- Installation: DIN-Rail or wall mounting
- Dimension (W x H x D): 65mm×150mm×120mm

IES6300SL-16GP4GS-2LV

- Housing: IP30 protection, metal
- Installation: DIN-Rail or wall mounting
- Dimension (W x H x D): 65mm×150mm×120mm
- Weight: 1.088kg

Industrial Standard

IEC 61000-4-2 (ESD, electrostatic discharge), Level 3

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

IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 3

- Power supply: ±2kV
- Ethernet port: ±1kV
- Relay: ±2kV

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

- Power supply: common mode ±6kV, differential mode ±2kV
- Ethernet port: common mode ±6kV, differential mode ±2kV
- Relay: common mode ±2kV, differential mode ±1kV

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-31

Vibration: IEC 60068-2-6

Authentication

CE, FCC, RoHS

Warranty

5 years

## Ordering Information

Model	Gigabit Copper Port	Gigabit PoE Copper Port	Gigabit SFP Slot	PoE Power	Power Supply
IES6300SL-4GT2GS-2LV-N	4	—	2	—	12~60VDC Dual power supply redundancy
IES6300SL-8GT4GS-2LV-N	8	—	4	—	12~60VDC Dual power supply redundancy
IES6300SL-4GP2GS-2LV-N	—	4	2	120W	44~57VDC Dual power supply redundancy
IES6300SL-8GP4GS-2LV-N	—	8	4	240W	44~57VDC Dual power supply redundancy
IES6300SL-16GT4GS-2LV-N	16	—	4	—	12~60VDC Dual power supply redundancy
IES6300SL-16GP4GS-2LV-N	—	16	4	240W	44~57VDC Dual power supply redundancy