



IES6300PRO Series

DIN-Rail Mounting

12/20-Port Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 8 or 16 Gigabit copper ports (optional PoE), 2 Gigabit SFP slots, 2 2.5G SFP slots, 2 DI and 2 DO
- Adopt Ring patented 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 Ipv6, PTP, STP/RSTP/MSTP, ERPS, VLAN, QoS, LACP, DHCP, IGMP Snooping, LLDP, ACL, SNMP and MEP.
- Support 3 optional power supplies: 24/48VDC, 48VDC PoE, 110/220VAC
- Support -40~75°C wide operating temperature range



Industrial Grade



RPS



Introduction

IES6300PRO series is 12/20-port Gigabit layer 2 managed industrial Ethernet switch. PoE power supply conforms to IEEE802.3af/at protocol standard. This series provide 6 products and support a variety of interfaces including Gigabit copper ports, Gigabit PoE copper ports, 100M/1G SFP slots, 100M/1G/2.5G SFP slots, I/O ports and USB. They adopt DIN-Rail mounting to meet the requirements of different application scenes.

The network management system supports a variety of network protocols and industry standards, such as IPv6, PTP, Ring, STP/RSTP/MSTP, ERPS, DHCP Server/Snooping/Relay, VLAN, QoS, IGMP Snooping, LLDP, 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. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

The DC 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

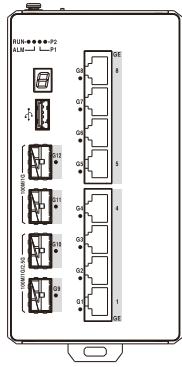
- ⊙ SNMPv1/v2c/v3 is used for network management of various levels
- ⊙ RMON can be used for efficient and flexible network monitoring
- ⊙ QoS supports real-time traffic classification and priority setting
- ⊙ LLDP can achieve automatic topology discovery, which is convenient for visual management
- ⊙ DHCP server 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
- ⊙ 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
- ⊙ Alarm log and log server can record user operation, system failure, system security and other information locally and remotely
- ⊙ 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
- ⊙ MEP function can determine the scope and boundary of maintenance domain
- ⊙ EVC configuration function can realize the connection between the two points of Ethernet service
- ⊙ 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
- ⊙ IGMP Snooping can be used for filtering multicast traffic to save the network bandwidth
- ⊙ Precision Time Protocol (PTP), provide sub-microsecond synchronization accuracy to meet requirements for high-precision time synchronization
- ⊙ 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, Ping6 and cable detection
- ⊙ Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- ⊙ Support both active and standby systems. If the main system fails during system startup, the standby system can be started automatically
- ⊙ Support 20s quick start of device power system

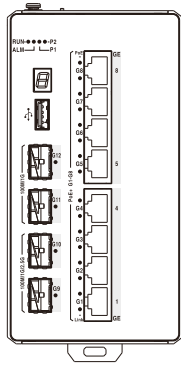
Dimension

Unit: mm

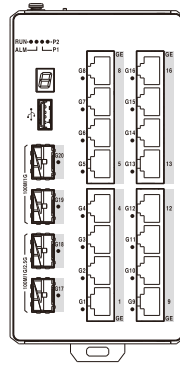
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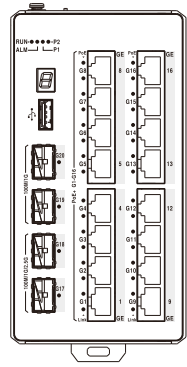
IES6300PRO
-8GT2GS2HS-2Di2Do-2LV



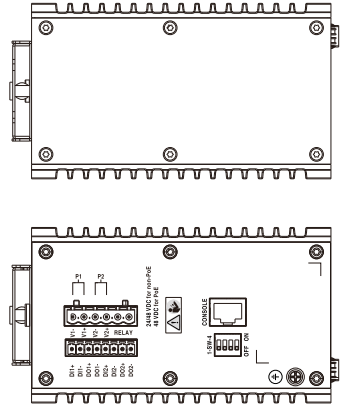
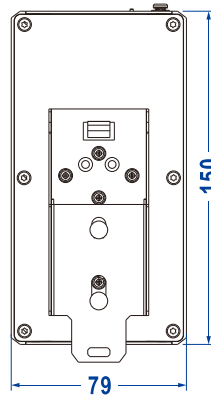
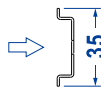
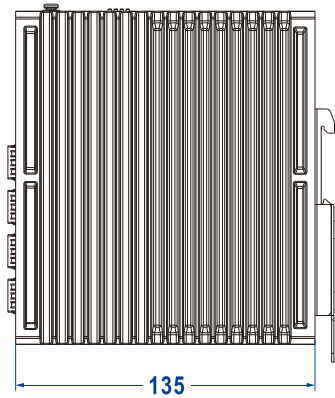
IES6300PRO
-8GP2GS2HS-2Di2Do-2LV



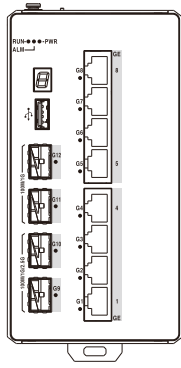
IES6300PRO
-16GT2GS2HS-2Di2Do-2LV



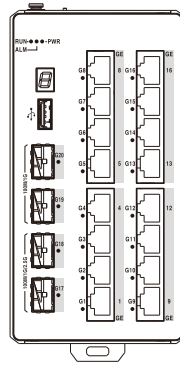
IES6300PRO
-16GP2GS2HS-2Di2Do-2LV



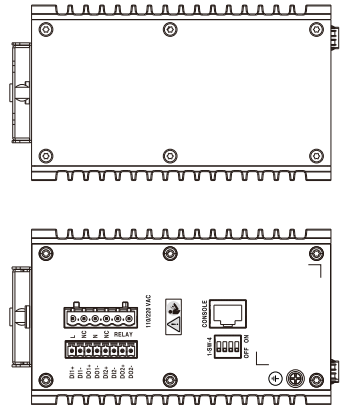
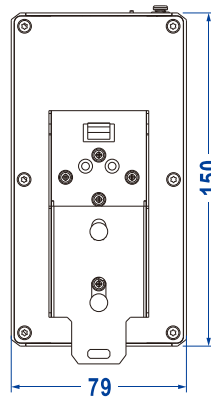
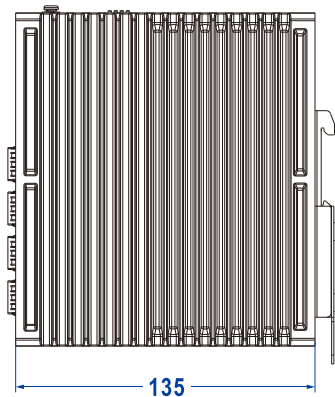
● AC device:



IES6300PRO
-8GT2GS2HS-2Di2Do-HV



IES6300PRO
-16GT2GS2HS-2Di2Do-HV



Specification

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| Standard & Protocol | <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 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> |
| Management | <p>SNMP v1/v2c/v3 Centralized Management of Equipment, QoS, PoE, DHCP Server, DHCP Relay, Static MAC Address, LLDP, LLDP-MED, Storm Suppression, User Password, Login Method, File Management, Log Management, Port Statistics, MEP</p> |
| Security | <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, DHCP Snooping, Temperature Protection</p> |
| Switch Function | <p>802.1Q VLAN, Static Aggregation, LACP</p> |
| Unicast / Multicast | <p>IGMP Snooping, Unicast MAC</p> |
| Redundancy Technology | <p>Ring, STP/RSTP/MSTP, ERPS</p> |
| Troubleshooting | <p>Ping, Ping6, Cable Detection, Port Mirroring, DDMI</p> |
| Time Management | <p>NTP client/server, PTP, Time zone configuration</p> |
| Interface | <p>Gigabit copper port: 10/100/1000Base-T(X) self-adaption, RJ45, full/half duplex, MDI/MDI-X self-adaption Gigabit PoE port: 10/100/1000Base-T(X) self-adaption, RJ45, Full/Half Duplex, MDI/ MDI-X self-adaption. The single port</p> |



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| | <p>supports 15.4W PoE output power of IEEE802.3af standard and 30W PoE+ output power of IEEE802.3at standard, power supply pin: 1/2-, 3/6+</p> <p>Gigabit SFP Slot : 100/1000Base-X self-adaption or forced mode, SFP slot</p> <p>2.5G SFP Slot: 100/1000/2.5G Base-X self-adaption or forced mode, SFP slot</p> <p>LED digital tube: support 1 seven-segment LED digital tube, which shows the running status of the device</p> <p>USB interface: support 1 USB2.0 Type-A(Female), which can be used to download logs, backup configuration files, or upload configuration files</p> <p>I/O port: Support 2 DI and 2 DO, 8-pin 3.81mm pitch terminal blocks, support dry contact input and relay-type output</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), support 1 relay alarm output, the current load capacity is 1A@30VDC or 0 3A@125VAC</p> |
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Indicator Running Indicator, Alarm Indicator, Power Supply Indicator, Interface Indicator, PoE Indicator

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| Switch Property | <p>Transmission mode: store and forward</p> <p>MAC address: 8K</p> <p>Buffer: 4Mbit</p> <p>Backplane bandwidth: 58G</p> <p>Switch delay: <10μs</p> |
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IES6300PRO-8GT2GS2HS-2Di2Do-2LV,
 IES6300PRO-16GT2GS2HS-2Di2Do-2LV:

- Power supply input: 24/48VDC (12~55VDC)
- Connection method: 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply on the left side)
- Power supply quantity: dual power supply redundancy backup
- Connection protection: anti-reverse connection

Power Supply

IES6300PRO-8GP2GS2HS-2Di2Do-2LV,
 IES6300PRO-16GP2GS2HS-2Di2Do-2LV:

- Power supply input: 48VDC (44VDC~55VDC)
- Connection method: 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply on the left side)
- Power supply quantity: dual power supply redundancy backup
- Connection protection: anti-reverse connection

IES6300PRO-8GT2GS2HS-2Di2Do-HV,
IES6300PRO-16GT2GS2HS-2Di2Do-HV:

- Power supply input: 110/220VAC (85~256VAC/DC)
- Connection method: 6-pin 5.08mm pitch terminal blocks (includes 4-pin power supply on the left side)
- Number of power supply: single power supply

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| Power Consumption | <240W (with PD load) |
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Working Environment
 Operating temperature: -40~75°C
 Storage temperature: -40~85°C
 Relative humidity: 5%~95%(no condensation)

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|--------------------------------|---|
| Physical Characteristic | Housing: IP40 protection, metal Installation: DIN-Rail mounting Dimension (W x H x D): 79mm×150mm×135mm |
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Industrial Standard

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

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

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

- DC power supply: ±2kV
- Copper port: ±2kV
- Relay: ±2kV

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

- DC power supply: differential mode±1kV, common mode±2kV
- Copper port: differential mode±1kV, common mode±2kV

Insulation strength: 500VAC, < 10mA
 Insulation resistance: ≥20MΩ
 Shock: IEC 60068-2-27
 Free fall: IEC 60068-2-32
 Vibration: IEC 60068-2-6

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| Authentication | CE, FCC, RoHS |
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Warranty 5 years

Ordering Information

| Available Models | Gigabit Copper Port | Gigabit PoE | Gigabit SFP | 2.5G SFP | DI | DO | Power Supply |
|--------------------------------------|---------------------|-------------|-------------|----------|----|----|----------------------------|
| IES6300PRO-8GT2GS2 HS-2Di2Do-2LV | 8 | — | 2 | 2 | 2 | 2 | 24/48VDC dual power supply |
| IES6300PRO-8GP2GS2 HS-2Di2Do-2LV | — | 8 | 2 | 2 | 2 | 2 | 48VDC dual power supply |
| IES6300PRO-8GT2GS2 HS-2Di2Do-HV | 8 | — | 2 | 2 | 2 | 2 | 110/220VAC |
| IES6300PRO-16GT2GS2 HS-2Di2Do-2LV | 16 | — | 2 | 2 | 2 | 2 | 24/48VDC dual power supply |
| IES6300PRO-16GP2GS2 HS-2Di2Do-2LV | — | 16 | 2 | 2 | 2 | 2 | 48VDC dual power supply |
| IES6300PRO-16GT2GS2 HS-2Di2Do-HV | 16 | — | 2 | 2 | 2 | 2 | 110/220VAC |



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