



## IES6300PN-8GT2HS-2LV

DIN-Rail or Wall Mounting

10-Port Gigabit Layer 2 Managed PROFINET Industrial Ethernet Switch

- Support 8 Gigabit copper ports and 2 Gigabit/2.5G SFP slots.
- Support PROFINET RT real-time communication and meet the requirements of consistency category CC-B
- Support PROFINET MRP network redundancy, improve network reliability, reconfiguration time  $\leq 200\text{ms}$
- Adopt Ring patented technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure  $< 20\text{ms}$
- Support dual power redundancy, input voltage 12~48VDC
- Support  $-40\sim 75^{\circ}\text{C}$  wide operating temperature range
- Support IP40 protection grade



# Introduction

---

IES6300PN-8GT2HS-2LV is a 10-port Gigabit layer 2 managed PROFINET industrial Ethernet switch, which supports PROFINET RT real-time communication and conforms to the consistency category CC-B. The product provides Gigabit copper ports, Gigabit /2.5G SFP slots, and can be configured as copper ports. It adopts DIN-Rail mounting, which can meet the requirements of application scenes.

The network management system supports various network protocols and industry standards, such as PROFINET, STP/RSTP/MSTP, MRP, 802.1Q VLAN, QoS function, LLDP, RMON, port mirroring, etc. It has perfect management functions, support port configuration, port statistics, access control, network diagnosis, rapid configuration, online upgrade, etc.; It can support WEB, SSH, Telnet, SNMP and other access methods; Provide GSD equipment description file, and realize simple and consistent configuration and diagnosis through STEP 7 or TIA Portal configuration tool. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

RESET button can reboot the device and restore factory defaults. The input power supply consists of two independent power supply circuits, which can ensure the normal operation of the device when one fails. When power supply, port or other configurable event has failure or alarm, 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 factory automation, process automation, smart grid, railway transportation, smart city, safe city, new energy, intelligent manufacturing, military project and other industrial fields.

## Features and Benefits

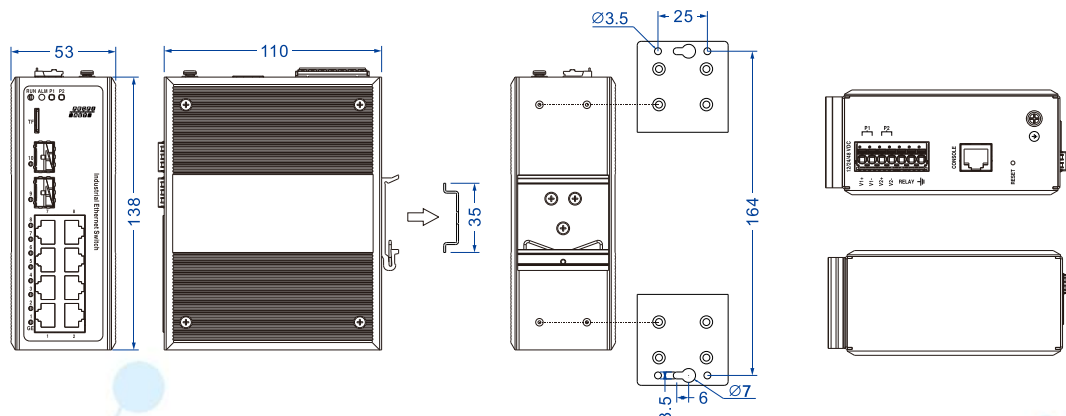
---

- ⦿ PROFINET conforms to the consistency class CC-B, which can respond to real-time communication, fast error detection and network self-healing quickly
- ⦿ SNMPv1/v2c/v3 is used for network management of various levels
- ⦿ Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- ⦿ RMON can be used for efficient and flexible network monitoring
- ⦿ QoS supports multiple modes based on CoS and DSCP, and supports traffic policies of SP and WRR
- ⦿ DHCP server can provide IP address assignment service within the LAN
- ⦿ Support static manual configuration and dynamically DHCP acquisition of IP address
- ⦿ LLDP can achieve automatic topology discovery, which is convenient for visual management

- File management is convenient for rapid configuration and online upgrading of the device
- Log information records startup information, operation information, connection information and alarm information, and supports Syslog server
- Port ingress rate limit, which can divide CoS priority and reasonably control data bandwidth according to bandwidth, protocol, storm or custom data protocol type
- Port statistics can be used for port real-time traffic statistics, displaying real-time network utilization in graph and detecting network performance
- User password can conduct user hierarchical management to improve the device management security
- Support port, temperature, voltage, MRP, neighbor, network load, packet loss, error and other alarm events, PROFINET, SNMP Trap, e-mail, relay and other alarm modes, which is convenient for discovering faults in time during remote management.
- SSH configuration could encrypt transmitted data, prevent DNS and IP spoofing
- Support multiple device access methods such as SSH, TELNET, HTTP and HTTPS
- 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 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
- Conduct network diagnosis and troubleshooting via Ping, Traceroute and cable diagnosis
- Loop detection could efficiently eliminate the influence caused by port loopback by detecting the existence of loopback in each port of switch periodically

## Dimension

Unit: mm




## 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  IEC 61158 and IEC 61784 for PROFINET  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  IEC 62439-2 for MRP  IEEE 802.1Q for VLAN  IEEE 802.1p for CoS  IEEE 802.1AB for LLDP  IEEE 802.3ad for LACP</p>
<b>Industrial Ethernet</b>	PROFINET V2.4
<b>Management</b>	SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, DHCP Client and Server, Port Mirroring, QoS, LLDP, File Management, Log Management, Syslog Server, Port Statistics
<b>Security</b>	Classification of User Permissions, Port Alarm, Temperature Alarm, Voltage Alarm, MRP Alarm, Neighbor Alarm, Network Load Alarm, Error Frame Alarm, Discarded Frame Alarm, E-mail Alarm, SNMP Trap Alarm, Relay Alarm, SSHD Configuration, Telnet Configuration, HTTP Configuration, HTTPS Configuration, Loop Detection
<b>Switch Function</b>	802.1Q VLAN, Port Static/Dynamic Aggregation, Bandwidth Management, Flow Control, Port Rate Limit, Port Isolation
<b>Unicast / Multicast</b>	Static Multicast, IGMP-Snooping
<b>Redundancy Technology</b>	Ring, MRP(Master/Client), STP/RSTP/MSTP
<b>Time Management</b>	NTP server and client
<b>Troubleshooting</b>	Ping, Traceroute, Cable Diagnosis
<b>Interface</b>	<p>Gigabit copper port: 10/100/1000Base-T(X) Self-Adaption or Forced Mode, RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/ MDI-X Autotuning</p> <p>SFP slot: 1000M/2.5G Base-X self-adaption or forced mode, SFP slot, can be configured as copper ports</p> <p>TF card slot: 1 TF(Micro SD) card slot</p> <p>Relay interface: Supports 1 relay alarm information output, adopts 7-pin 5.08mm pitch wiring terminals, the relay</p>

occupies 2 pins, and the current load capacity is 1A@30VDC or 0.3A@125VAC

Console port: CLI command line management port (RS-232), RJ45

Indicator	Running indicator, Alarm indicator, Power supply indicator, Interface indicator
Switch Property	Transmission mode: store and forward MAC address: 16K Cache: 2Mbit Backplane bandwidth: 20G Switch time delay: <10 $\mu$ s
Power Supply	Power input 12~48VDC, dual power supply redundancy, support non-polarity Adopt 7-pin 5.08mm pitch terminal blocks (power supply occupies 4 pins)
Power Consumption	No-load: 3.1W@48VDC Full-load: 7.8W@48VDC
Working Environment	Operating temperature: -40~75°C Storage temperature:-40~85°C Relative humidity: 0%~95% (no condensation)
Physical Characteristic	Housing: IP40 protection, aluminum shell Installation: DIN-Rail or wall mounting Dimension (W x H x D): 53mm×138mm×110mm Weight: 683g
Industrial Standard	IEC 61000-4-2 (ESD, electrostatic discharge), Level 3 <ul style="list-style-type: none"><li>● Air discharge: <math>\pm</math>8kV</li><li>● Contact discharge: <math>\pm</math>6kV</li></ul> IEC 61000-4-4 (EFT, electrical fast transient), Level 3 <ul style="list-style-type: none"><li>● Power supply: <math>\pm</math>2kV</li><li>● Signal: <math>\pm</math>1kV</li></ul> IEC 61000-4-5 (Surge), Level 3 <ul style="list-style-type: none"><li>● Power supply: common mode <math>\pm</math>2kV, differential mode <math>\pm</math>1kV</li><li>● Signal: common mode<math>\pm</math>2kV, differential mode<math>\pm</math>1kV</li></ul> Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32



	Vibration: IEC 60068-2-6
--	--------------------------

Authentication	CE, FCC, RoHS
----------------	---------------

Warranty	5 years
----------	---------

## Ordering Information

Model	Gigabit Copper Port	Gigabit/2.5G SFP	Power Supply
IES6300PN-8GT2HS-2LV-N	8	2	12~48VDC dual power supply redundancy