



IES6200-PN-16T4GS-2P48

DIN-Rail Mounting

20-Port 100M/Gigabit Layer 2 Managed PROFINET Industrial Ethernet Switch

- Support 4 Gigabit fiber ports (SFP slot) and 16 100M copper ports
- 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 SW-Ring patented technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure $< 20\text{ms}$
- Support dual power supply, input voltage: 12~48VDC
- Support $-40\sim 75^{\circ}\text{C}$ wide operating temperature range



Introduction

IES6200-PN-16T4GS-2P48 is 20-port 100M/Gigabit layer 2 managed PROFINET industrial Ethernet switch, which supports PROFINET RT real-time communication and conforms to the consistency category CC-B. This product provides 100M copper ports, Gigabit SFP slots and other interfaces, and it adopts DIN-Rail mounting which can meet the requirements of different scenes.

The network management system supports various network protocols and industry standards, such as PROFINET, STP/RSTP/MSTP, ERPS, MRP, 802.1Q VLAN, QoS function, IGMP static multicast, SNMP, LLDP, RMON, DHCP, NTP, etc. It has perfect management functions, support port configuration, access control, network diagnosis, rapid configuration, online upgrade, etc.; It can support CLI, WEB, 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.

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. When power supply, port or other configurable event has 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. 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, rail transit, smart city, safety city, new energy, intelligent manufacturing and other industrial fields.

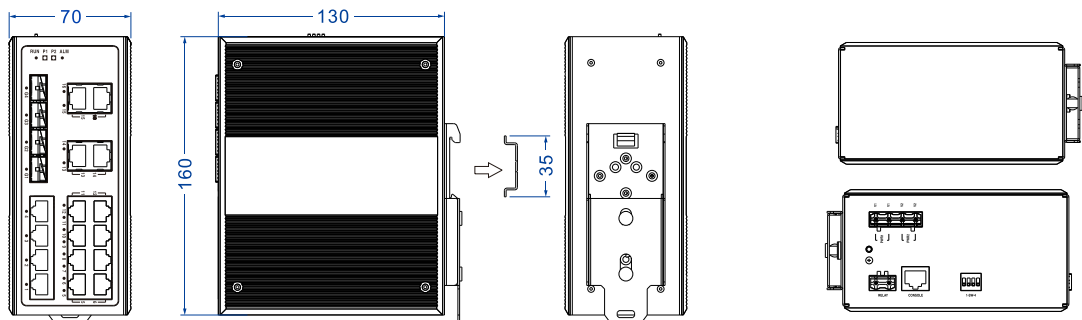
Features and Benefits

- ⊙ 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
- ⊙ QoS supports real-time traffic classification and priority setting
- ⊙ DHCP server can be used for distributing IP address with different strategies
- ⊙ File management is convenient for the device rapid configuration and online upgrading
- ⊙ User password can conduct user hierarchical management to improve the device management security
- ⊙ Mac port lock could strengthen the flexibility and security of network
- ⊙ E-mail alarm is convenient for rapid fault discovery during remote management
- ⊙ 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 can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- IGMP Snooping and static multicast can be used for filtering multicast traffic to save the network bandwidth
- SW-Ring, MRP, STP/RSTP/MSTP can achieve network redundancy, preventing network storm
- RMON can be used for efficient and flexible network monitoring
- LLDP can achieve automatic topology discovery, which is convenient for visual management
- Conduct network diagnosis and troubleshooting via Ping and Traceroute
- With high reliability and stability, ERPS could avoid broadcast storm caused by data loopback
- 802.1X authentication could strength the flexibility and security of network
- 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

<p>Standard & Protocol</p>	<p>IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX 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</p>
--------------------------------	--

	<p>IEEE 802.1w for Rapid Spanning Tree Protocol</p> <p>IEEE 802.1s for Multiple Spanning Tree Protocol</p> <p>IEC 62439-2 for MRP</p> <p>IEEE 802.1Q for VLAN</p> <p>IEEE 802.1p for CoS</p> <p>IEEE 802.1X for 802.1X Authentication</p> <p>IEEE 802.1AB for LLDP</p>
Industrial Ethernet	PROFINET V2.4
Management	SNMP v1/v2c/v3 Centralized Management of Equipment, Port Mirroring, QoS, DHCP Server, File Management, Port Statistics, LLDP, Log Management, Syslog Server
Security	User privilege classification, power alarm, port alarm, temperature alarm, MRP alarm, network load alarm, error neighbor alarm, error frame alarm, dropped frame alarm, relay alarm, mail alarm, SNMP Trap alarm, 802.1X, DHCP Snooping, and loop detection.
Switch Function	802.1Q VLAN, Static Port Aggregation, Bandwidth Management, Flow Control
Unicast / Multicast	Static Multicast, IGMP-Snooping
Redundancy Technology	SW-Ring, MRP(Master/Client), STP/RSTP/MSTP, ERPS
Troubleshooting	Ping, Traceroute
Time Management	NTP server and client
Interface	<p>Copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotuning</p> <p>SFP interface: Gigabit SFP slot</p> <p>Console port: CLI command line management port(RS-232), RJ45</p> <p>Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current load capability is 5A@30VDC or 10A@125VAC</p>
Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator
Switch Property	<p>Transmission mode: store and forward</p> <p>MAC address: 8K</p> <p>Buffer: 3Mbit</p> <p>Backplane bandwidth: 12.8G</p>

Switch time delay: <math><10\mu\text{s}</math>

Power Supply	12~48VDC, 4-pin 7.62mm pitch terminal blocks Dual power supply redundancy, non-polarity and anti-reverse connection Support 4A overcurrent protection
Power consumption	No-load: 5.28W@24VDC Full-load: 11.06W@24VDC
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): 70mm×160mm×130mm Weight: ≤ 1.1kg
Industrial Standard	IEC 61000-4-2 (ESD, electronic static discharge), Level 4 <ul style="list-style-type: none">● Air discharge: ± 15kV● Contact discharge: ±8kV IEC 61000-4-4 (EFT, electrical fast transient), Level 4 <ul style="list-style-type: none">● Power supply: ±4kV● Ethernet port: ±2kV● Relay: ±4kV IEC 61000-4-5 (Surge), Level 2 <ul style="list-style-type: none">● Power supply: common mode ±1kV, differential mode ±500V● Ethernet port: ±2kV● Relay: common mode ±1kV, differential mode ±500V 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

Available Models	Gigabit SFP Slot	100M Copper Port	Power Supply
IES6200-PN-16T4GS-2P48-N	4	16	12~48VDC dual power supply