3onedata
Reliable Connections



IES6000-PN-8T2GT-2P(12-48VDC)

Wall Mounting

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

- Support 8 100M M12 and 2 Gigabit M12
- 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 ≤200ms
- Adopt Ring patented technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms
- Support dual power redundancy, input voltage: 12~48VDC
- Support -40~75℃ wide operating temperature range
- Support IP67 protection grade

Industrial Grade RPS

Introduction

IES6000-PN-8T2GT-2P(12-48VDC) is 10-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. The Ethernet interface adopts firm and reliable M12 form, which can be applied to scenes with severe vibration and impact. This product provides 8 100M M12 and 2 Gigabit M12. It adopts wall mounting, which can meet the needs of different application fields.

The network management system supports various network protocols and industry standards, such as PROFINET, STP/RSTP/MSTP, MRP, 802.1Q VLAN, QoS function, LLDP, port trunking, port mirroring, etc. It has perfect management functions, support leak current, port configuration, port statistics, access control, network diagnosis, rapid configuration, online upgrade, etc.; It can support CLI, 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.

The input power supply is two independent power supply circuits which can ensure the normal operation of the device when one power supply fails. When port, power supply or other configurable events have failure or alarm, ALM indicator will be bright and send out prompt 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.

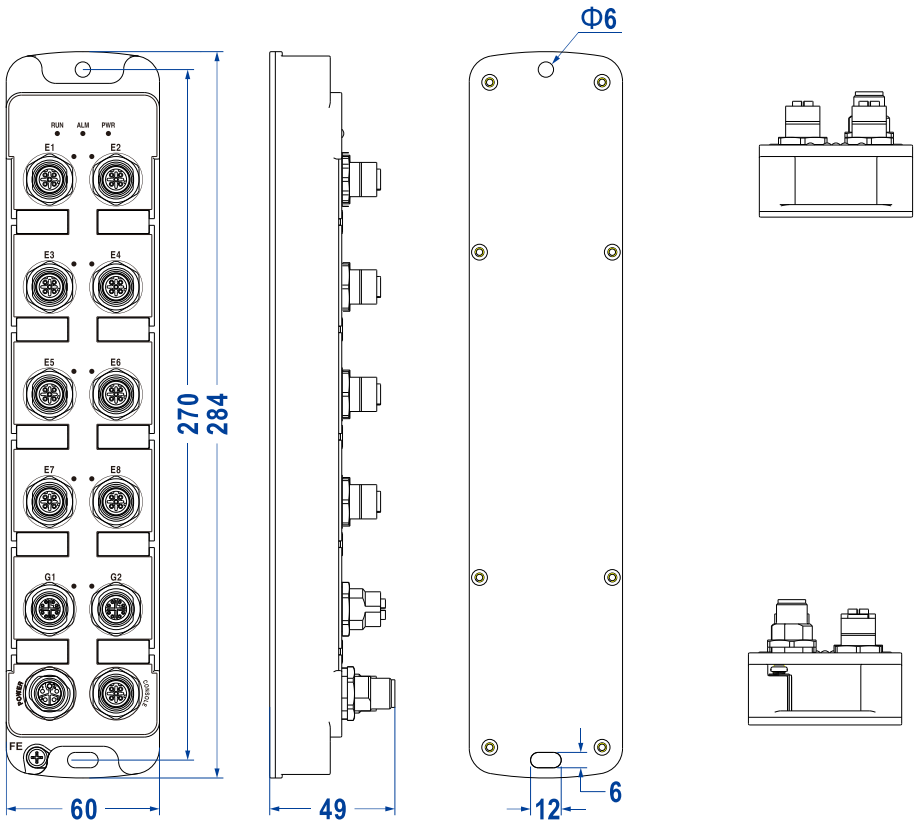
Features and Benefits

- 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
- Support static manual configuration and dynamically DHCP assignment IP address
- DHCP server can provide IP address assignment service within the LAN
- NTP server and NTP client can provide time synchronization with millisecond precision
- QoS supports multiple modes based on CoS and DSCP, and supports traffic policies of SP and WRR
- 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, which can be uploaded to the remote 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, leak current, neighbor, network load, packet loss, error and other alarm events, SNMP Trap, e-mail and other alarm modes, which is convenient for discovering faults in time during remote management.
- Access Control can enhance network flexibility and security
- SSHD configuration could encrypt transmitted data, prevent DNS and IP spoofing
- 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 testing
- Leak current monitoring and providing spectrum diagrams of various modes, which is convenient to check the influence of interference current on network communication

Dimension

Unit: mm



Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T 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
Industrial Ethernet	PROFINET V2.4
Management	SNMP v1/v2c/v3 Centralized Management of Equipment, DHCP Server, DHCP Client, Port Mirroring(TX,RX,TX&RX), QoS, LLDP, File Management, Log Management, Syslog Server, Port Statistics
Security	Classification of User Permissions, Access Control, Port Alarm,

	Temperature Alarm, Power Supply Alarm, MRP Alarm, Leakage Current Alarm, Network Load Alarm, Wrong Neighbor Alarm, Error Frame Alarm, Discarded Frame Alarm, Cable Quality Alarm, E-mail Alarm, SSHD Configuration, Telnet Configuration, HTTPS Configuration
Switch Function	802.1Q VLAN, Port Static/Dynamic Aggregation, Bandwidth Management, Flow Control, Port Rate Limit
Redundancy Technology	Ring, MRP(Master/Client), STP/RSTP/MSTP
Troubleshooting	Leak Current, Ping, Traceroute, Cable Diagnosis
Time Management	NTP server, NTP client
Interface	100M M12: 10/100Base-T(X), M12(Female), 4-Pin D-Code, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning Gigabit M12:10/100/1000Base-T(X), M12(Female), 8-Pin X-Code, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotunning. Console port: CLI command line management port (RS-232), M12(Female), 4-Pin D-Code
Indicator	RUN indicator, ALM indicator, power supply indicator, interface indicator
Switch Property	Transmission mode: store and forward Packet forwarding rate: 4.1664Mpps MAC address: 16K Buffer: 2Mbit Backplane bandwidth: 20G Switch time delay: <10μs
Power Supply	12~48VDC dual power supply redundancy, M12(Male), 5-Pin L-Code, built-in fuse with 3A current limit
Power Consumption	No-load: 4.7W@48VDC Full-load: 6.8W@48VDC
Working Environment	Operating temperature: -40~75℃ Storage temperature:-40~85℃ Relative humidity: 5%~95% (no condensation)
Physical	Housing: IP67 protection, metal

Characteristic	Installation: wall mounting Dimension (W x H x D): 60mm×284mm×49mm Weight: 786g
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 IEC 61000-4-5 (Surge), Level 3 ● Power supply: common mode±2kV, differential mode±1kV ● Ethernet interface: common mode±2kV Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
MTBF	382,614 hours
Authentication	CE, FCC, PROFINET CC-B
Warranty	5 years

Ordering Information

Available Models	100M M12	Gigabit M12	Power Supply
IES6000-PN-8T2GT-2P(12-48VDC)	8	2	12~48VDC, dual power supply redundancy

Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road, Nanshan District, Shenzhen, 518108, China
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