



IPS7110 Series

DIN-Rail Mounting

10-port 100M/Gigabit Layer 2 Managed Industrial PoE Ethernet Switch

- Support 2 gigabit Combo ports(SFP slot or RJ45) and 4/8 100M PoE copper ports
- The maximum power consumption of single PoE is 30W
- Adopt SW-Ring patent technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms
- Support dual power supply input, input voltage: 48VDC
- Support -40~75℃ wide operating temperature range



Industrial Grade



RPS



Introduction

IPS7110 series are 10-port 100M/gigabit layer 2 managed industrial PoE Ethernet switches, and the PoE power supply is up to the protocol standard of IEEE 802.3af/at. This series have two products and provide 100M copper port, PoE copper port and gigabit Combo port (SFP slot or RJ45). They also adopt DIN-Rail mounting, which can meet the requirements of different scenes.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 802.1Q VLAN, QoS, LLDP, PoE Configuration, IGMP Static Multicast, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, Network Diagnosis, Rapid Configuration, Online Upgrading and so on, and supports CLI, WEB, Telnet, SNMP and other access methods. It can provide users with good experience with friendly design of network management system interface, simple 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 power supply or port has link failure, ALARM 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 grid, rail transit, smart city, safety city, new energy, aerospace, intelligent manufacturing, military project and other industrial fields.

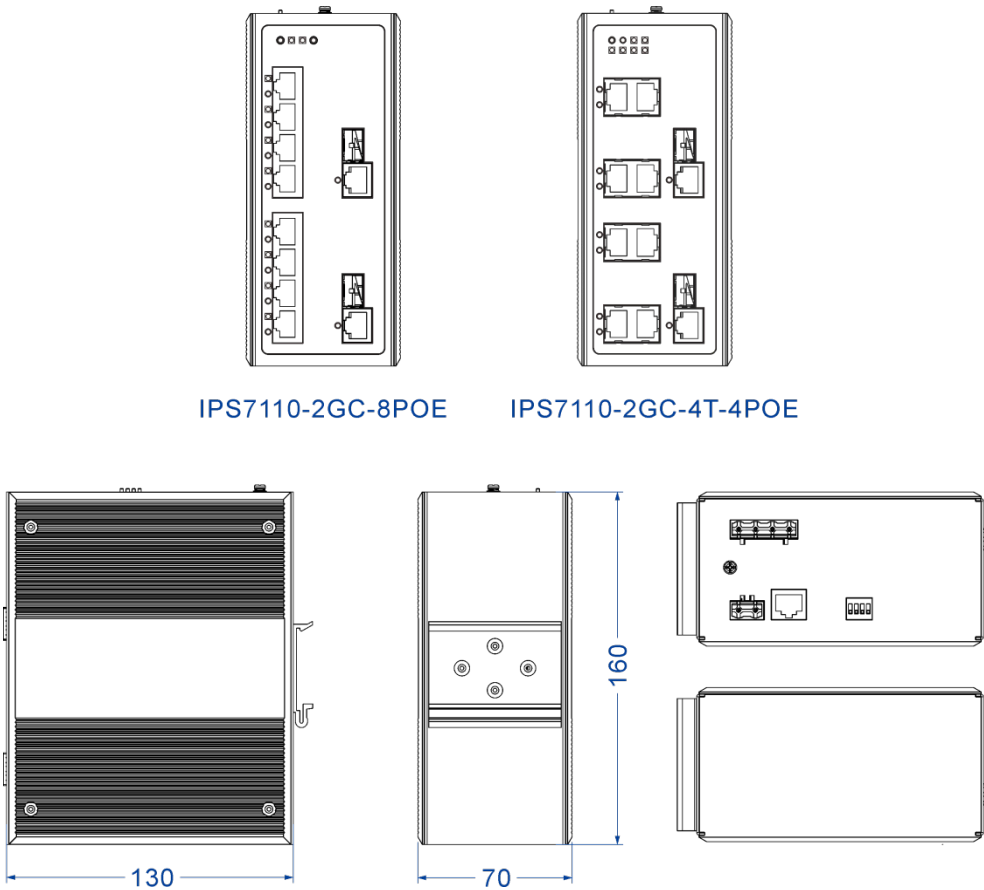
Features and Benefits

- ⦿ SNMPv1/v2c 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
- ⦿ LLDP can achieve automatic topology discovery, which is convenient for visual management
- ⦿ File management is convenient for rapid configuration and online upgrade of the device
- ⦿ 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
- ⦿ Relay alarm is convenient for troubleshooting of construction site
- ⦿ Storm suppression can restrain the broadcast, unknown multicast and unknown 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
- Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status
- IGMP Snooping and static multicast can be used for filtering multicast traffic to save the network bandwidth
- SW-Ring and STP/RSTP can achieve network redundancy, preventing network storm
- PoE could power device over Ethernet, thus decreasing the cable connection of powered devices

Dimension

Unit:mm



Specification

| | |
|---------------------|---|
| Standard & Protocol | 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 802.1Q for VLAN IEEE 802.1p for CoS IEEE 802.3ad for LACP IEEE 802.3af for PoE IEEE 802.3at for PoE+ |
| Management | SNMP v1/v2c Centralized Management of Equipment, Port Mirroring, QoS, LLDP, DHCP Client, File Management, Port Statistics |
| Security | Classification of User Permissions, Port Alarm, Power Supply Alarm, Storm Suppression |
| Switch Function | 802.1Q Vlan, Static Port Aggregation, Bandwidth Management, Flow Control |
| Unicast / Multicast | Static Multicast, IGMP-Snooping |
| Redundancy Protocol | SW-Ring, STP/RSTP |
| Time Management | SNTP |
| PoE | The maximum power consumption of PoE port: 30W The power supply pin of PoE: V+, V+, V-, V- correspond to Pin 1, 2, 3, 6 |
| Interface | 100M copper port: 10/100Base-T(X), RJ45, Automatic Flow Control, Full/half Duplex Mode, MDI/MDI-X Autotuning Combo port: 10/100/1000Base-T(X) or 1000Base-FX Console port: CLI command line management port (RS-232), RJ45 Alarm port: 2-pin 7.62mm pitch terminal blocks, support 1 relay alarm output, current carrying capacity is 1A@24VDC or 0.5A@120VAC |
| LED Indicator | Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator, PoE Indicator |
| Switch Property | Transmission mode: store and forward MAC address: 8K Packet buffer size: 1Mbit |

| | Backplane bandwidth: 7.6G Switch time delay: <10μs | | | | | | | | | |
|-------------------------|--|--------------------|------------------|--------------------|------------------|------|--------|---------------------|------|--------|
| Power Requirement | 48VDC, 4-pin 7.62mm pitch terminal blocks Dual power supply redundancy, reverse polarity protection | | | | | | | | | |
| Power Consumption | <table><tr><th>model</th><th>No-load (@48VDC)</th><th>Full-load (@48VDC)</th></tr><tr><td>IPS7110-2GC-8POE</td><td>4.3W</td><td>123.6W</td></tr><tr><td>IPS7110-2GC-4T-4POE</td><td>8.9W</td><td>114.4W</td></tr></table> | model | No-load (@48VDC) | Full-load (@48VDC) | IPS7110-2GC-8POE | 4.3W | 123.6W | IPS7110-2GC-4T-4POE | 8.9W | 114.4W |
| model | No-load (@48VDC) | Full-load (@48VDC) | | | | | | | | |
| IPS7110-2GC-8POE | 4.3W | 123.6W | | | | | | | | |
| IPS7110-2GC-4T-4POE | 8.9W | 114.4W | | | | | | | | |
| Environmental Limit | Operating temperature range: -40~75℃ Storage temperature range: -40~75℃ 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: ≤1.07kg | | | | | | | | | |
| Industrial Standard | IEC 61000-4-2 (ESD), Level 3 <ul style="list-style-type: none">Air discharge: ±8kVContact discharge: ±6kV EN61000-4-4 (EFT), Level 3 <ul style="list-style-type: none">Power supply:±2kVEthernet port: ±2kVRelay: ±2kV IEC 61000-4-5 (Surge), Level 3 <ul style="list-style-type: none">Power supply: common mode±2kV, differential mode±1kVEthernet port: ±2kVRelay: common mode±2kV, differential mode±1kV Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6 | | | | | | | | | |
| Certification | CE, FCC, RoHS | | | | | | | | | |
| Warranty | 5 years | | | | | | | | | |

Ordering Information

| Available Models | Gigabit Combo (SFP slot or RJ45) | 100M Copper Port | 100M POE Copper Port | Power Supply |
|---------------------|-------------------------------------|---------------------|-------------------------|--------------|
| IPS7110-2GC-8POE | 2 | – | 8 | 48VDC dual |
| IPS7110-2GC-4T-4POE | 2 | 4 | 4 | power supply |



Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road,
Nanshan District, Shenzhen, 518108, China
TEL.: +86-755-26702668 ext 835 FAX: +86-755-26703485
E-mail: ics@3onedata.com
Website: www.3onedata.com

◀ Please scan our QR code for more details

*Product pictures and technical data in this datasheet are only for reference. Updates are subject to change without prior notice. The final interpretation right is reserved by 3onedata.