

**10-port Full Gigabit Managed Industrial PoE Switch  
(TN3M10PGIPOESW)  
120W/ 48-57VDC)**



## OVERVIEW

TN3M10PGIPOESW is a full Gigabit managed industrial PoE fiber switch. It has 8\*10/100/1000M PoE ports and 2\*100/1000M SFP fiber ports. Port 1-8 can support IEEE802.3af/at standard POE. single port POE power up to 30W. As a POE power supply device, it can automatically detect and identify the electrical equipment that meets the standard and supply power through the cable. It can supply the POE terminal equipment, such as wireless AP, network camera, network telephone, industrial sensor and so on, to meet the demand for high density PoE power supply network environment. It is suitable for intelligent transportation, rail transit, electric power, mining, metallurgy and green energy. Industrial scenes such as construction set up a cost-effective and stable communication network.

The TN3M10PGIPOESW has L2+ network management function, support IPV4 management, static route full line rate forwarding, security protection mechanism, ACL/QoS policy and VLAN, and is easy to manage and maintain. Support multiple network redundancy protocols STP/RSTP/MSTP(<50ms) to improve link backup and network reliability. When one-way network fails, communication can be quickly restored to ensure important Uninterrupted communication for applications. According to the actual application requirements, you can configure multiple application services such as PoE power management, port traffic control, VLAN division, and SNMP through the Web network management mode.

## FEATURE

### Gigabit access, SFP fiber port uplink

- Support Gigabit Ethernet port and Gigabit SFP port combination, which enables users to flexibly build networking to meet the needs of various scenarios.
- Support non-blocking wire-speed forwarding.
- Support full-duplex based on IEEE802.3x and half-duplex based on backpressure.

### Powerful port lightning protection, ultra-wide voltage input

- Contact discharge 8KV, air discharge 15KV, port lightning protection common-mode 4KV, differential mode 2KV
- Industrial dual power input
- DC INPUT: 48V-57V

### Intelligent PoE power supply

- 8\*10/100/1000Base-T RJ45 ports, meeting the needs of security monitoring, teleconferencing system, wireless coverage, and other scenarios.
- IEEE802.3af/at PoE standard, without damaging non-PoE devices.
- Priority system for PoE port, it will supply power to the high priority level port first when the power budget is insufficient and avoid overwork of the device.
- PoE network management, realize PoE port power allocation, priority setting, port power status viewing, time scheduling, etc.

### Intelligent PoE power supply

- IEEE802.1Q VLAN, flexible VLAN division and QinQ configuration.

- QoS, Priority mode based on 802.1P, Port & DSCP,
- queue scheduling algorithm including EQU, SP, WRR & SP+WRR.
- ALC, filter data packet through configuring matching rules, processing operation & time permission, and provide flexible and safe access control.
- IGMP V1/V2 and IGMP Snooping.
- STP/RSTP/MSTP.
- Static and dynamic aggregation.

### Security

- 802.1X authentication.
- Port isolation, Storm control.
- IP-MAC-VLAN-Port binding.

### Security

- Low power consumption, aluminum shell. No fan.
- CCC, CE, FCC, RoHS.
- The user-friendly panel, it can show the device status through the LED indicator of PWR, SYS, Link, L/A, PoE.

## TECHNICAL SPECIFICATION

Model	TN3M10PGIPOESW
<b>Interface Characteristics</b>	
	2 set of bypass optical fiber ports 1*Console RS232 port (115200,N,8,1) 2*100/1000Base-X uplink SFP ports (Data) 8*10/100/1000Base-T PoE ports (Data/Power) 2 set of V+, V- redundant DC power ports (5P Phoenix terminal)
Bypass Optical Port	Power ON: P1—P4 intercommunication, P2—P3 intercommunication Power OFF: P1—P3 Pass-through
Ethernet Port	Port 1-8 support 10/100/1000Base-T auto-sensing, full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)
SFP Slot Port	Gigabit SFP optical fiber interface, default no include optical modules (Only supports single-mode single fiber optical module. LC)
Optical Cable/Distance	Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.

Chip Parameter	
Network Management Type	L2+
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	20Gbps
Forwarding Rate@64byte	14.88Mpps
CPU(Hz)	500M
DRAM	1G
Flash	128M
MAC	8K
Buffer Memory	4M
Jumbo Frame	10K
LED Indicator	Power/ System: SYS(Green), Network: Link (Yellow), PoE: PoE (Green) Fiber port: L/A (Green)
Reset Switch	Yes. Press and hold the reset switch for 10 seconds and release it to restore factory settings
PoE & Power Supply	
PoE Port	Port 1 to port 8 IEEE 802.3 af/at
PoE Management	PoE working status display, Port PoE out on/off
Power Supply Pin	1/2 (+) 3/6 (-)
Max Power Per Port	30W, IEEE 802.3 af/at

Total Power/ Input Voltage	120W/ 48-57VDC
Power Consumption	Standby<8W, Full load<120W
Input Voltage/ Interface	DC48-57V, 5Pin industrial phoenix terminal, support anti-reverse protection.
Power Supply	No, optional 48V/120W or 48V/240W industrial power supply
<b>Physical Parameter</b>	
Operation TEMP / Humidity	-40°C~+75°C, 5%~90% RH Non condensing
Storage TEMP / Humidity	-40°C~+85°C, 5%~95% RH Non condensing
Dimension (L*W*H)	165*148*54mm
Net /Gross Weight	<0.8kg / <1.2kg
Installation	Desktop, 35mm DIN rail
<b>Certification &amp; Warranty</b>	
Lightning Protection	<p>Lightning protection: 6KV 8/20us, Protection level: IP40</p> <p>IEC61000-4-2(ESD): ±8kV contact discharge, ±15kV air discharge</p> <p>IEC61000-4-3(RS): 10V/m(80~1000MHz)</p> <p>IEC61000-4-4(EFT): power cable: ±4kV; data cable: ±2kV</p> <p>IEC61000-4-5(Surge): power cable: CM±4kV/DM±2kV; data cable: ±4kV</p> <p>IEC61000-4-6(radio frequency transmission): 10V(150kHz~80MHz)</p> <p>IEC61000-4-8(power frequency magnetic field): 100A/m, 1000A/m ,1s to 3s</p>

	<p>IEC61000-4-9(pulsed magnet field): 1000A/m</p> <p>IEC61000-4-10(damped oscillation): 30A/m 1MHz</p> <p>IEC61000-4-12/18(shockwave): CM 2.5kV,DM 1kV</p> <p>IEC61000-4-16(common-mode transmission): 30V; 300V,1s</p> <p>FCC Part 15/CISPR22(EN55022): Class B</p> <p>IEC61000-6-2(Common Industrial Standard)</p>
Mechanical Properties	<p>IEC60068-2-6 (anti vibration), IEC60068-2-27 (anti shock)</p> <p>IEC60068-2-32 (free fall)</p>
Certification	<p>CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B,</p>
	<p>RoHS</p>
Warranty	<p>3 years, lifelong maintenance.</p>