

TNS5800D Series

8-Port 10/100Base-T(X) M12 + 4-Port 10/100/1000Base-T(X) M12

EN50155 Layer 3 M12 Managed Industrial Ethernet Switch

Features

- Support IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1W/D, IEEE802.1s, IEEE802.3ad, IEEE802.1X
- Support 8 10/100Base-T(x) M12 ports and 4 10/100/1000Base-T(x) M12 ports
- Support static routing
- Support RIPv1/v2, BGP4 for IP routing
- Support OSPFv2/v3, VRRP routing
- Support equivalent routing, policy routing
- Support ND (Neighbor Discovery)
- SW-Ring ring network patent technology (Fault recovery time<20ms)
- Support STP/RSTP/MSTP to enhance network stability
- Support IEEE802.1X, HTTPS, and SSH to enhance network security
- Support ACL function to enhance flexibility and security of network management
- Support static multicast, IGMP Snooping and GMRP
- Support Port based VLAN and IEEE 802.1Q VLAN
- Support QoS absolutely and opposite priority
- Support bandwidth management and storm suppression
- Support WEB, SNMP, LLDP and Telnet configuration
- Support port mirror, port trunking and port frame statistics
- Support one 110VAC/DC (100-240VAC/DC) input, and one relay alarm output
- Industrial design, -40-75℃ work temperature
- IP30 protection grade, wall mounting



Introduction

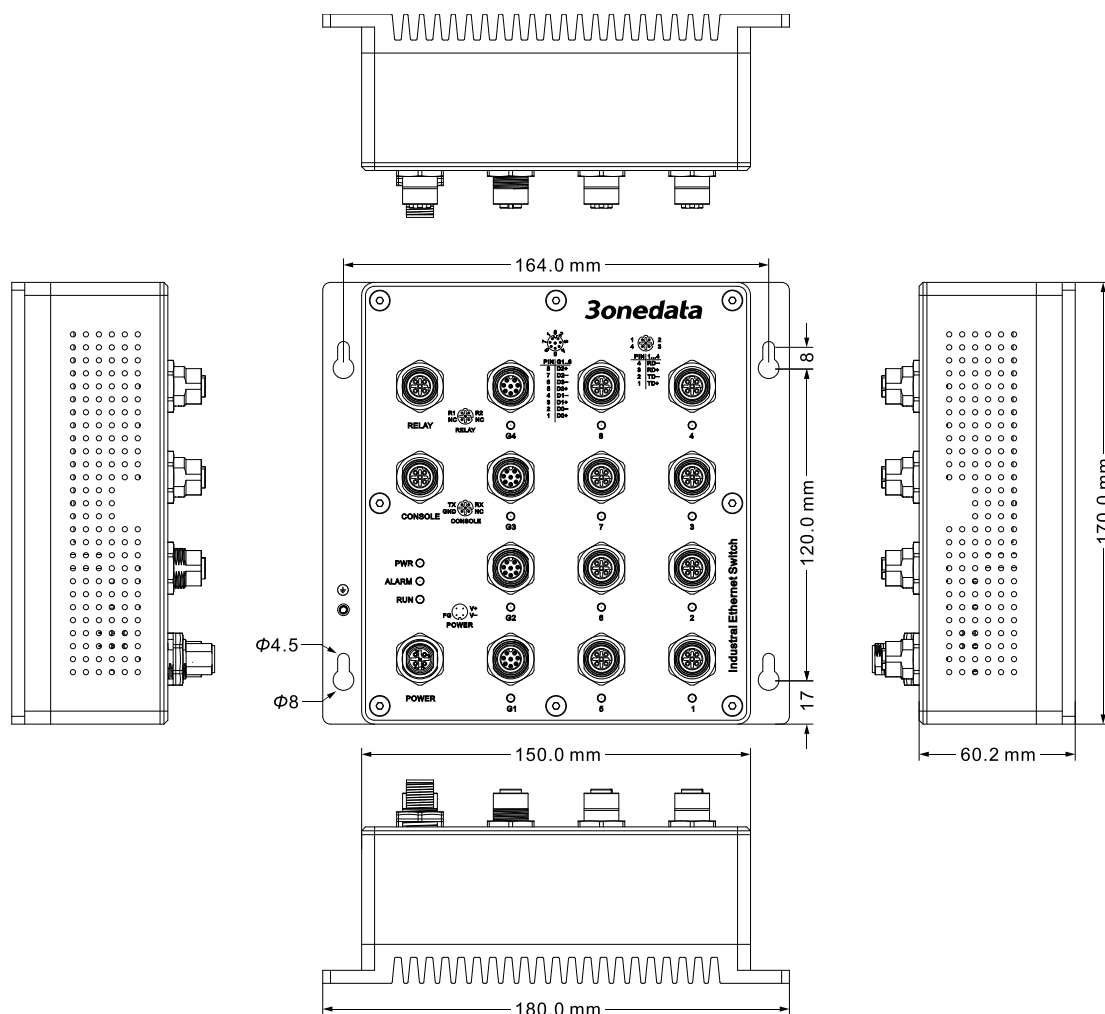
TNS5800D are smart industrial three-layer switches featuring high performance and high cost-effective. It is provided with 8 10/100Base-T(X) M12 ports and 4 10/100/1000Base-T(X) M12 ports. The increase of bandwidth promotes the communication of network data, which makes it suitable for application in large-scale industrial network.

TNS5800D series support many advanced management functions such as: IGMP, GMRP, DHCP Server/Client, STP/RSTP/MSTP, QOS, Port Mirroring, LLDP, Static Routing, RIPv1/V2, OSPF, and VRRP. The IP three-layer routing protocols, multicast technology and policy routing offer perfect IP solutions for the users. At the same time, this series also supports such management modes as

SNMPv1/v2/v3 (Simple Network Management Protocol), CLI command line, Web, and Telnet, allowing users to easily manage the devices and ensuring safer management with the combination of enhanced ACL control function and anti-attack function.

TNS5800D series are in compliance with FCC and CE standards, and has one relay fault alarm output. Users can make their choices flexibly according to actual application. TNS5800D series adopt fan-less industrial design, and can be used in a severe industrial environment at a working temperature of -40℃ ~ 75℃, satisfying all kinds of industrial network environment and providing reliable and economic solutions for your Ethernet connection.

Dimension (Unit: mm)



Specification

Technology

Standard: IEEE802.3, IEEE802.3u, IEEE802.3z/ab, IEEE802.3af/at, IEEE802.3x, IEEE802.1Q, IEEE802.1p, IEEE802.1W/D, IEEE802.1s, IEEE802.3ad, IEEE802.1X

Flow control: IEEE802.3x flow control, back press flow control

Protocol

IGMP Snooping, GMRP, SNMPv1/v2/v3, QOS, STP/RSTP/MSTP, DHCP Server/Client, VLAN, LLDP, SNTP, Telnet, HTTP/HTTPS, SSH, LACP

Layer3 Switch technology

Static routing, RIP V1/V2, OSPF, VRRP, BGP, ND

Exchange attribute

100M forward speed: 148810pps
1000M forward speed: 1488100pps
Transmit mode: store and forward
Forwarding Rate: 7.14Mpps (packets per second)
System exchange bandwidth: 128Gbps

MAC address table: 16K

Memory: 12Mbit

Interface

Fast Ethernet: M12 D-coded 4-pin female connector, 10/100BaseT(X) auto negotiation speed, full / half duplex, self-adaptive working mode, MDI/MDI-X self-adaptive

Gigabit Ethernet: M12 A-coded 8-pin female connector, 10/100/1000BaseT(X) auto negotiation speed, full / half duplex, self-adaptive working mode, MDI/MDI-X self-adaptive, with bypass relay function

Console Port: M12 D-coding 4-pin female connector

Alarm Port: M12 D-coding 4-pin female connector with current carrying capacity of 1A @ 24VDC

Transfer distance

Twisted cable: 100m (standard CAT5e/CAT6 cable)

LED indicator

Run indicator: RUN

Power supply indicator: PWR

Alarm indicator: ALARM

Interface indicator: Link (1~8/G1~G4)

Power supply

Input Voltage: 110VAC/DC (100-240VAC/DC)

Type of input: M12 A-coded 4-pin male connector

Consumption

No-load consumption: 14.30W@110VDC

Full-load consumption: 14.85W@110VDC

Working environment

Working temperature: -40~75°C

Storage temperature: -40~75°C

Relative Humidity: 5%~95 % (no condensation)

Mechanical Structure

Shell: IP30 protect grade, metal shell

Installation: wall mounting

Size (L×W×H): 180mm×170mm×60.2 mm

Weight: 2.06kg

Industry Standard

EMI: FCC Part 15, CISPR (EN55022) class A

EMS: EN61000-4-2 (ESD), Level 3

EN61000-4-4 (EFT), Level 3

EN61000-4-5 (Surge), Level 3

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

Certification

CE, FCC, RoHS, UL508 (Pending)

Warranty: 5 years

Ordering Information

TNS5800D-4GT-8T: 8-port 10/100Base-T(X) M12 + 4-port 10/100/1000Base-T(X) M12, EN50155 Layer 3 M12 Managed Industrial Ethernet Switch, 100-240VAC/DC, wall mounting.

Packing List

1. Layer 3 M12 Industrial Ethernet Switch (plus terminal block) ×1
2. User manual × 1
3. Documentation and software CD × 1
4. Certificate of quality × 1
5. Warranty card × 1