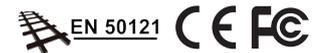


TN-5308-4/8PoE Series

EN 50155 8-port unmanaged Ethernet switches with 4/8 PoE ports



- > 4 or 8 IEEE 802.3af compliant PoE and Ethernet combo ports
- > Provides up to 15.4 watts at 48 VDC per PoE port
- > Complies with a portion of EN 50155 specifications
- > -40 to 75°C operating temperature range (T models)



Introduction

The ToughNet TN-5308-4/8PoE series M12 unmanaged Ethernet switches are designed for industrial applications in harsh environments. The M12 connectors ensure tight, robust connections, and guarantee reliable operation, even for applications that are subject to high vibration and shock. The TN-5308-4/8PoE series Ethernet switches provide 8 Fast Ethernet M12 ports with 4/8 IEEE 802.3af compliant PoE (Power-over-Ethernet) ports. The switches are classified as power source equipment (PSE) and provide up to 15.4 watts of power per port.

The TN-5308-4/8PoE switches can be used to power IEEE 802.3af compliant powered devices (PDs), eliminating the need for additional wiring. The switches support IEEE 802.3/802.3u/802/3x with 10/100M, full/half-duplex, MDI/MDI-X auto-sensing, and provide an economical solution for your industrial Ethernet network. Models with an extended operating temperature range of -40 to 75°C are also available. The TN-5308-4/8 PoE series Ethernet switches comply with a portion of EN 50155 specifications, covering operating temperature, power input voltage, surge, ESD, and vibration, making the switches suitable for a variety of industrial applications.

Specifications

Technology

Standards:

- IEEE 802.3 for 10BaseT
- IEEE 802.3u for 100BaseT(X)
- IEEE 802.3x for Flow Control
- IEEE 802.3af for Power-over-Ethernet

Processing Type: Store and Forward

Interface

M12 Ports: 10/100BaseT(X) auto negotiation speed, F/H duplex mode and auto MDI/MDI-X connection

Power Requirements

Input Voltage: 48 VDC

Operating Voltage: 46 to 50 V

Input Current:

- TN-5308-4PoE: 1.6 A @ 48 VDC
- TN-5308-8PoE: 2.9 A @ 48 VDC

Overload Current Protection: 3 A @ 48 VDC

Connection: M12 connector

Reverse Polarity Protection: 3 A @ 48 VDC

PoE (per port)

Max. Output Power: 15.4 W

Output Voltage: 44 to 48.5 VDC

Max. Output Current: 350 mA

Max. Overload Protection: 400 mA

Physical Characteristics

Housing: Metal

IP Rating: IP40 protection

Dimensions:

TN-5308-4PoE: 60 x 216.6 x 48.7 mm (2.36 x 8.53 x 1.91 in)

TN-5308-8PoE: 80 x 216.6 x 52.9 mm (3.15 x 8.53 x 2.1 in)

Weight:

TN-5308-4PoE: 675 g (1.49 lb)

TN-5308-8PoE: 970 g (2.14 lb)

Installation: Panel mounting, DIN-rail mounting (with optional kit)

Environmental Limits

Operating Temperature:

Standard Models: -25 to 60°C (-13 to 140°F)

Wide Temp. Models: -40 to 75°C (-40 to 167°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Standards and Certifications

Safety: UL/cUL 508, EN 60950-1 (LVD)

EMI: FCC Part 15 Subpart B Class A, EN 55032 Class A

EMS:

IEC 61000-4-2 ESD: Contact 6 kV; Air 8 kV

IEC 61000-4-3 RS: 20 V/m (80 MHz to 1 GHz)

IEC 61000-4-4 EFT: Power 2 kV; Signal 2 kV

IEC 61000-4-5 Surge: Power 2 kV; Signal 2 kV

IEC 61000-4-6 CS: 10 V

IEC 61000-4-8

Rail Traffic: (for panel mounting installations)

EN 50155*, EN 50121-4, EN 45545-2

*Complies with a portion of EN 50155 specifications.

Shock: EN 50155, IEC 61373

Freefall: IEC 60068-2-32

Vibration: EN 50155, IEC 61373

Note: Please check Moxa's website for the most up-to-date certification status.

MTBF (mean time between failures)

Time:

TN-5308-4PoE-48 Series: 252,075 hrs

TN-5308-8PoE-48 Series: 308,392 hrs

Standard: Telcordia SR332

Warranty

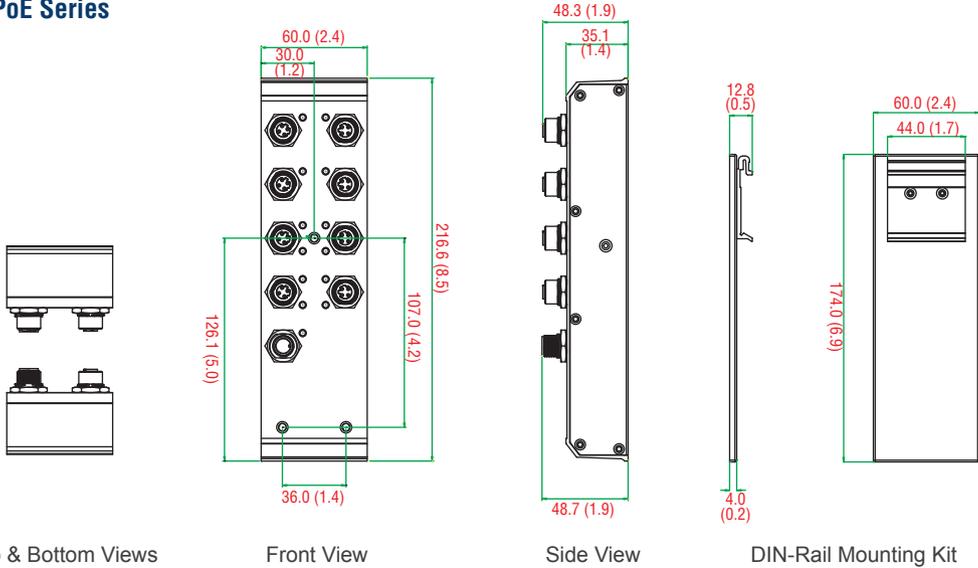
Warranty Period: 5 years

Details: See www.moxa.com/warranty

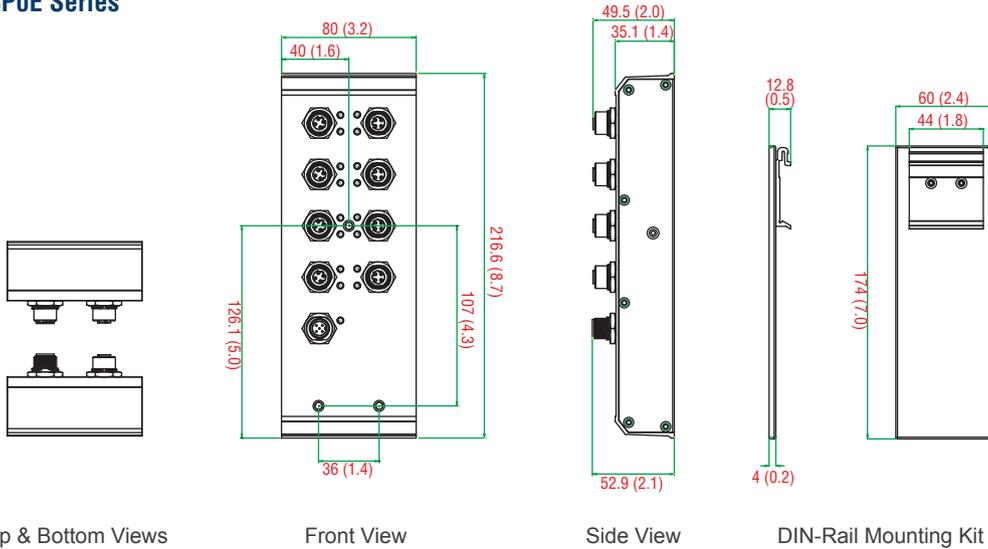
Dimensions

Unit: mm (inch)

TN-5308-4PoE Series



TN-5308-8PoE Series



Ordering Information

Available Models		Port Interface	
Standard Temperature (-25 to 60°C)	Wide Temperature (-40 to 75°C)	PoE, 10/100BaseT(X), M12 connector	10/100BaseT(X), M12 connector
TN-5308-4PoE-48	TN-5308-4PoE-48-T	4	4
TN-5308-8PoE-48	TN-5308-8PoE-48-T	8	0

Package Checklist

- TN-5308-4/8PoE switch
- Hardware installation guide
- Warranty card

Note: Conformal coating is available on request.

Optional Accessories (can be purchased separately)

Power Cords, M12 Connectors, Protective Caps: See the EN 50155 Switch Accessories datasheet for details

DR-75-48/120-48: 75/120 W DIN-rail 48 VDC power supplies

EN 50155 Switch Accessories

: M12/M23 Cords

CBL-M12D(MM4P)/RJ45-100 IP67

1-meter M12-to-RJ45 Cat-5C UTP Ethernet cable with IP67-rated 4-pin male D-coded M12 connector



CBL-M12(FF5P)/OPEN-100 IP67

1-meter M12-to-5-pin power cable with IP67-rated 5-pin female A-coded M12 connector



CBL-M23(FF6P)/Open-BK-100 IP67

1-meter M23-to-6-pin power cable with IP67-rated 6-pin female M23 connector



CBL-M12XMM8PRJ45-Y-200-IP67

2-meter M12-to-RJ45 Cat-5 UTP Ethernet cable with IP67-rated 8-pin male X-coded crimp type M12 connector



CBL-M12XMM8P-Y-300-IP67

3-meter M12-to-M12 Cat-5 UTP Ethernet cable with IP67-rated 8-pin male X-coded crimp type M12 connector



CBL-M12XMM8P-Y-100-IP67

1-meter M12-to-M12 Cat-5 UTP Ethernet cable with IP67-rated 8-pin male X-coded crimp type M12 connector



: M12 Connectors

M12D-4P-IP68

Field-installable M12 D-coded screw-in sensor connector, 4-pin male, IP68-rated



M12A-5P-IP68

Field-installable M12 A-coded screw-in sensor connector, 5-pin female, IP68-rated



M12X-8PMM-IP67-HTG

Field-installable M12 X-coded crimp type, slim design connector, 8-pin male, IP67-rated



: M12 IP67 Protective Caps

A-CAP-M12F-M

Metal cap for M12 female connector



A-CAP-M12M-M

Metal cap for M12 male connector



: M23 Connectors

A-PLG-WPM23-01

M23 cable connector, 6-pin female, crimp type

