

TN-5308-4/8PoE Series

EN 50155 8-port IEEE 802.3af PoE unmanaged Ethernet switches



- > 4 IEEE 802.3af compliant PoE and Ethernet combo ports
- > Provides up to 15.4 watts at 48 VDC per PoE port
- > Compliant with essential sections of EN 50155
- > -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 are compliant with the essential sections of EN 50155, 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

Flow Control:

IEEE802.3x flow control, back pressure flow control

Interface

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

LED Indicators: PWR, LNK/ACT, PoE

Power Requirements

Input Voltage: 48 VDC (46 to 50 V)

Input Current:

- TN-5308-4PoE: 4.6 A @ 48 VDC
- TN-5308-8PoE: 2.9 A @ 48 VDC

Overload Current Protection: 3 A @ 48 VDC

Connection: M12 connector

Reverse Polarity Protection: Present

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, 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 49.5 mm (3.15 x 8.53 x 1.95 in)

Weight:

TN-5308-4PoE: 675 g

TN-5308-8PoE: 970 g

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

Environmental Limits

Operating Temperature:

Standard Models: -25 to 60°C (32 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 508 (Pending)

EMI: FCC Part 15 Subpart B Class A, EN 55022 Class A

EMS:

- EN 61000-4-2 (ESD) Level 3,
- EN 61000-4-3 (RS) exceeds Level 3,
- EN 61000-4-4 (EFT) Level 3,
- EN 61000-4-5 (Surge) Level 3,
- EN 61000-4-6 (CS) Level 3,
- EN 61000-4-8,
- EN 61000-4-11

Rail Traffic: (for panel mounting installations)

EN 50155, EN 50121-4

Shock: IEC 61373

Freefall: IEC 60068-2-32

Vibration: IEC 61373

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

Warranty

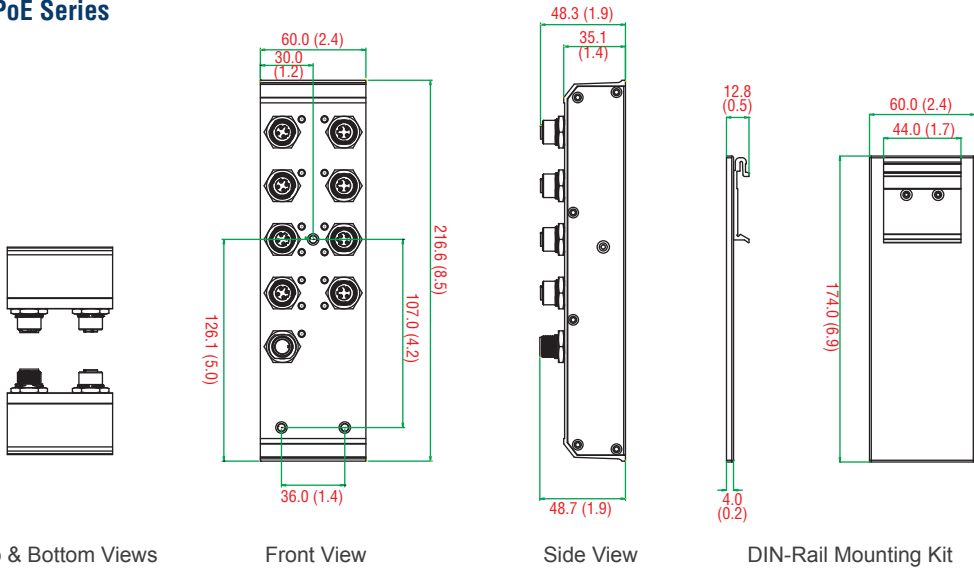
Warranty Period: 5 years

Details: See www.moxa.com/warranty

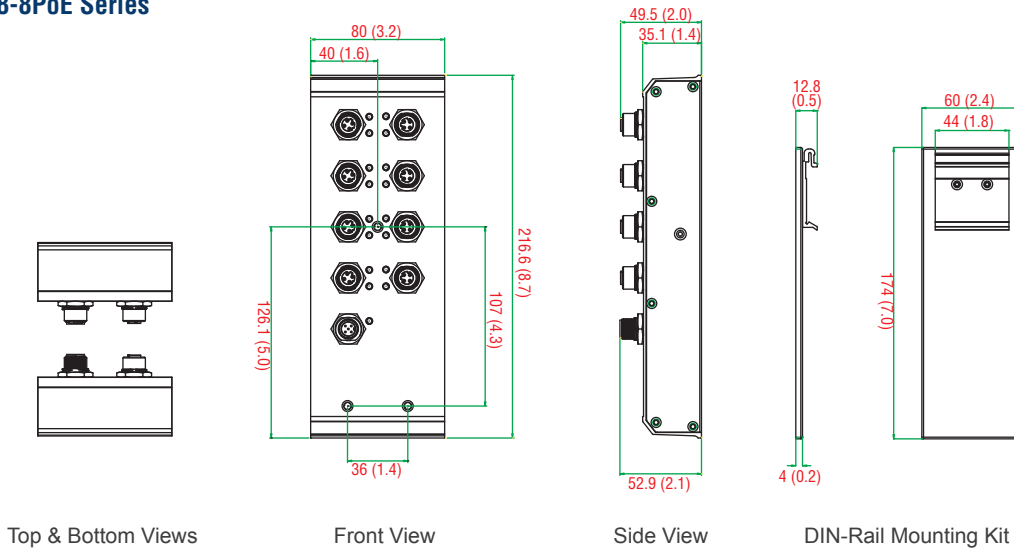
Dimensions

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

Note: Conformal coating is available on request.

Package Checklist

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

Optional Accessories (must be purchased separately)

DR-75-48/DR-120-48: 75/120 W DIN-Rail 48 VDC power supplies
Power Cords, M12 Connectors, Protective Caps: See page 2-22

Accessories

: M12/M23 Power 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



: M12 Connectors

M12D-4P-IP68

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



M12A-5P-IP68

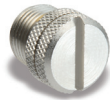
Field-installable M12 A-coded screw-in sensor connector, 5-pin female, IP68-rated



: M12 IP67 Protective Caps

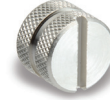
A-CAP-M12F-M

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

