

# TN-5308-4/8PoE Series

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



- > 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: 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:** 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

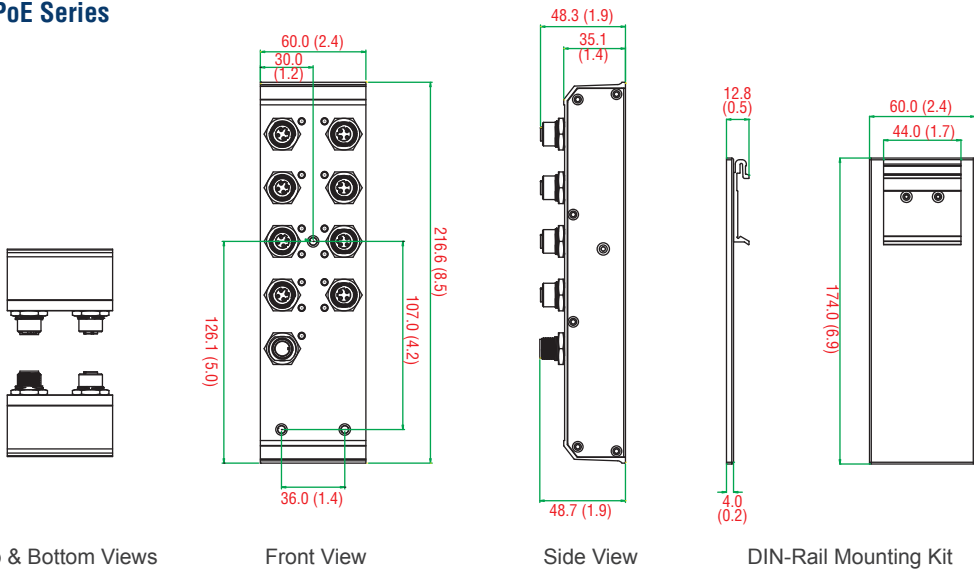
**Warranty Period:** 5 years

**Details:** See [www.moxa.com/warranty](http://www.moxa.com/warranty)

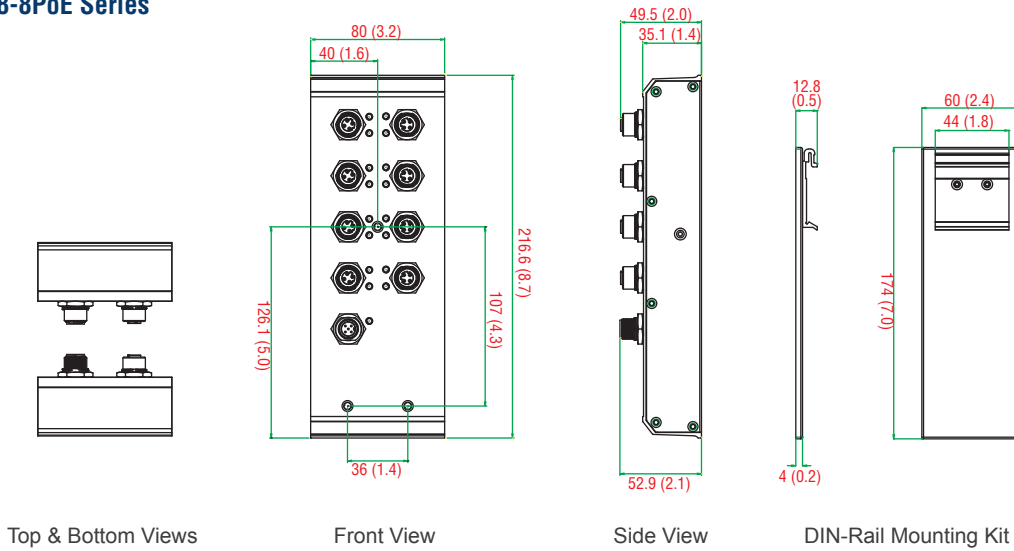
**Dimensions**

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** (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