

TN-5308 Series Preliminary

8-port M12 unmanaged Ethernet switches



- > Universal 12/24/36/48 or 72/96/110 VDC power supply range
- > M12 connectors and IP40 metal housing
- > Supports IEEE 802.3/802.3u/802.3x
- > EN50155/50121-3-2/50121-4, NEMA TS2, and e1 compliant
- > -40 to 75°C operating temperature range (T models)

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.



Introduction

The ToughNet TN-5308 series M12 unmanaged Ethernet switches are designed for industrial applications in harsh environments. The TN series switches use M12 connectors to ensure tight, robust connections, and guarantee reliable operation against environmental disturbances, such as vibration and shock. The TN-5308 series Ethernet switches provide 8 fast Ethernet M12 ports, 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 series Ethernet switches are compliant with EN50155/50121-3-2/50121-4 (railway applications), NEMA TS2 (traffic control systems), and e1 (vehicles) requirements, 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

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

Power Requirements

Input Voltage:

- TN-5308-LV: 12/24/36/48 VDC (7 to 60 VDC)
- TN-5308-MV: 72/96/110 VDC (50.4 to 154 VDC)

Overload Current Protection: Present

Connection:

- TN-5308-LV: M12 A-coding, 5-pin male connector
- TN-5308-MV: M23 A-coding, 5-pin male connector

Reverse Polarity Protection: Present

Physical Characteristics

Housing: Metal, IP40 protection

Dimensions:

- TN-5308-LV: 60 x 216.6 x 36.1 mm (2.36 x 8.53 x 1.42 in)
- TN-5308-MV: 60 x 216.6 x 53.7 mm (2.36 x 8.53 x 2.11 in)

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

Environmental Limits

Operating Temperature:

- Standard Models: 0 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)

Operating Humidity: 5 to 95% RH (non-condensing)

Regulatory Approvals

Safety: UL508 (Pending)

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

EMS:

- EN61000-4-2 (ESD), level 3
- EN61000-4-3 (RS), level 4
- EN61000-4-4 (EFT), level 3
- EN61000-4-5 (Surge), level 3
- EN61000-4-6 (CS), level 3
- EN61000-4-8
- EN61000-4-11
- EN61000-4-12

Traffic Control: NEMA TS2 (Pending), e1 (Pending)

Rail Traffic: EN50155 (Environmental, Pending), EN50121-3-2 (Pending), EN50121-4 (Pending)

Shock: IEC61373

Freefall: IEC60068-2-32

Vibration: IEC61373

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

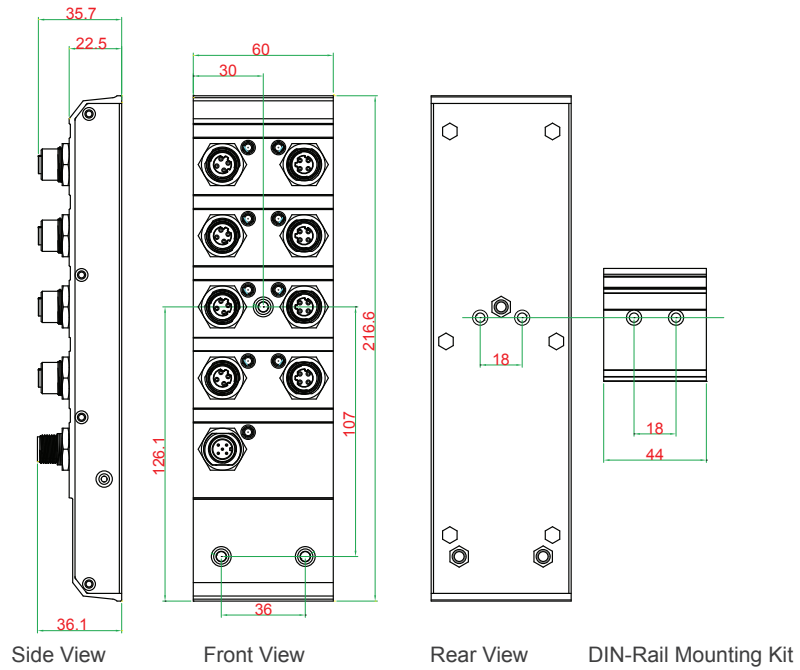
Warranty

Warranty Period: 5 years

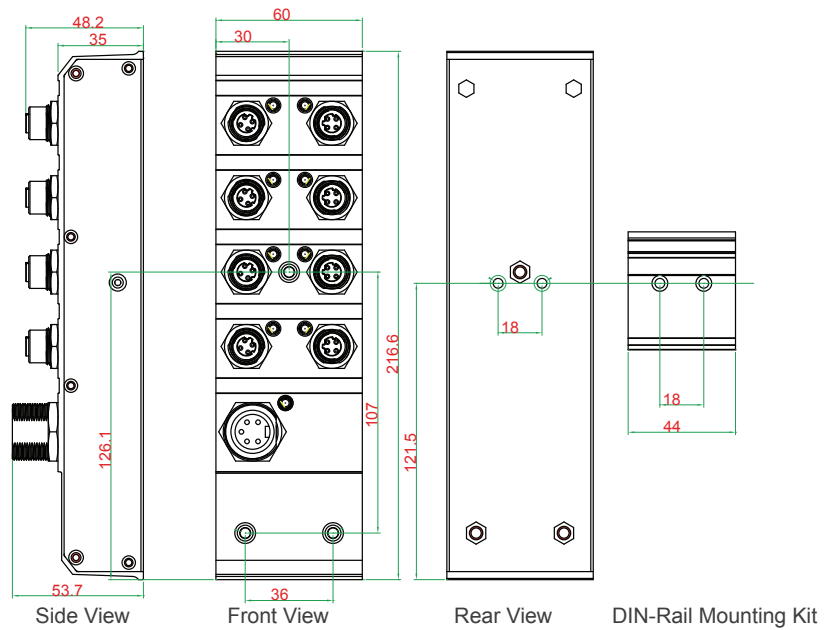
Details: See www.moxa.com/warranty

Dimensions (unit = mm)

TN-5308-LV Series



TN-5308-MV Series



Ordering Information

Available Models		Power Supply	
Standard Temperature (0 to 60°C)	Wide Temperature (-40 to 75°C)	LV	MV
		12/24/36/48 VDC (7 to 60 V)	72/96/110 VDC (50.4 to 154V)
TN-5308-LV	TN-5308-LV-T	√	---
TN-5308-MV	TN-5308-MV-T	---	√

Optional Accessories (must be purchased separately)

DK-44: DIN-Rail mounting kit, 44 x 48.3 mm

Connectors and Patch Cords: M12-type and M23-type