

# TN-5305 Series

## EN50155 5-port IP67 unmanaged Ethernet switches



- > M12 connectors and IP67 rated housing
- > 10/100BaseT(X), 4-pin M12 (D-coding), F/H duplex mode, and auto MDI/MDI-X connection
- > Power input: 12 to 45 VDC, 18 to 30 VAC
- > -40 to 75°C operating temperature range (T models)



### Introduction

The TN-5305 series Ethernet switches are IP67 rated for the toughest industrial applications, which means that the rugged housing and connectors guard against dust, water, and oil. By using M12 connectors, you can rest assured that Ethernet cables will connect tightly to the switch, and will be robust enough to protect your

applications from external disturbances, such as the vibration and shock encountered in the transportation industry. The space-saving TN-5305 switches can be mounted virtually anywhere, and wide operating temperature (-40 to 75°C) models are also available for use in the extremest of conditions.

### 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:** IEEE 802.3x full duplex, 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:** Power, LNK/ACT

#### Power Requirements

##### Input Voltage:

- 12 to 45 VDC
- 18 to 30 VAC (47 to 63 Hz)

##### Input Current:

- 0.12A @ 24 VDC
- 0.28A @ 24 VAC

**Overload Current Protection:** 1.1 A (Limited Current)

**Connection:** 1 M12 socket (A-coding), single power input

**Reverse Polarity Protection:** Present

#### Physical Characteristics

**Housing:** Plastic, IP67 protection

**Dimensions:** 60 x 125 x 27.6 mm (2.36 x 4.92 x 1.09 in)

**Weight:** 250 g

**Installation:** Field-style 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)

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

#### Regulatory Approvals

**Safety:** UL508

**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 2
- EN61000-4-8
- EN61000-4-11

**Maritime:** DNV, GL (Pending), ABS, LR, NK

**Rail Traffic:** (for panel mounting installations)  
EN50155 (Environmental), EN50121-3-2 (Pending),  
EN50121-4 (Pending)

**Shock:** IEC 60068-2-27

**Freefall:** IEC 60068-2-32

**Vibration:** IEC 60068-2-6

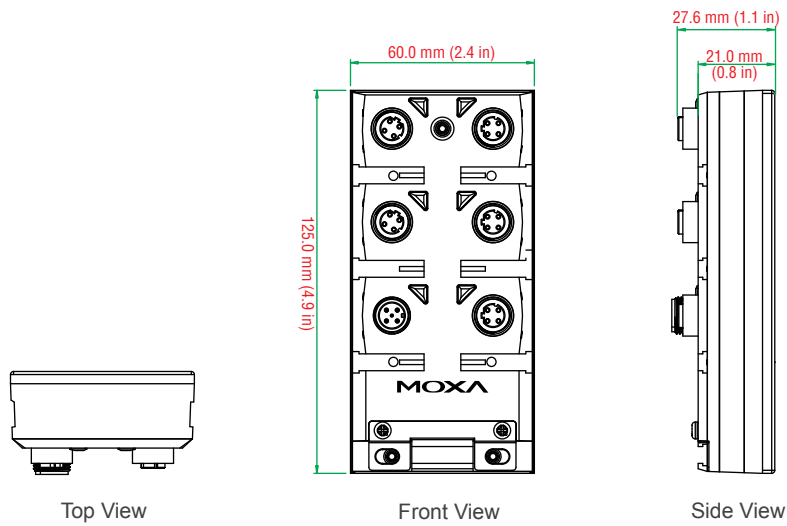
*Note: Please check Moxa's website for the most up-to-date certification status.*

#### Warranty

**Warranty Period:** 5 years

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

## Dimensions



## : Ordering Information

### Available Models

**TN-5305:** Industrial M12/IP67 unmanaged Ethernet switch with 5 10/100BaseT(X) ports, 0 to 60°C operating temperature

**TN-5305-T:** Industrial M12/IP67 unmanaged Ethernet switch with 5 10/100BaseT(X) ports, -40 to 75°C operating temperature

**Optional Accessories** (can be purchased separately)

**DR-4524/75-24/120-24:** 45/75/120 W DIN-Rail 24 VDC power supplies

# Accessories

## : M12/M23 Power Cords

### **CBL-M12D(MM4P)/RJ45-100 IP67**

1-meter M12-to-RJ45 Cat-5E 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(FF5P)/Open-BK-100 IP67**

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



## : M12 Connectors

### **M12D-4P-IP68**

Field-installable M-12 D-coded screw-in sensor connector, 4-pin male, IP68-rated



### **M12A-5P-IP68**

Field-installable M-12 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

