TN-5305 Series

EN 50155 5-port IP67 unmanaged Ethernet switches

> 10/100BaseT(X), 4-pin M12 (D-coding), F/H duplex mode, and auto MDI/MDI-X connection
> IP67 rated housing protection
> Power input: 12 to 45 VDC, 18 to 30 VAC
> Compliant with essential sections of EN 50155
> -40 to 75°C operating temperature range (T models)

EN 50155 CE FC

: 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. The TN-5305 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
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:
• 24 VDC (12 to 45 V)
• 18 to 30 VAC (47 to 63 Hz)
Note: Compliant with EN 50155 on 24 VDC
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 29.6 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: -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
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 2,
EN 61000-4-8,
EN 61000-4-11
Rail Traffic: (for panel mounting installations)
EN 50155, EN 50121-4 (Pending)
Shock: IEC 60068-2-27
Freefall: IEC 60068-2-32
Vibration: IEC 60068-2-6
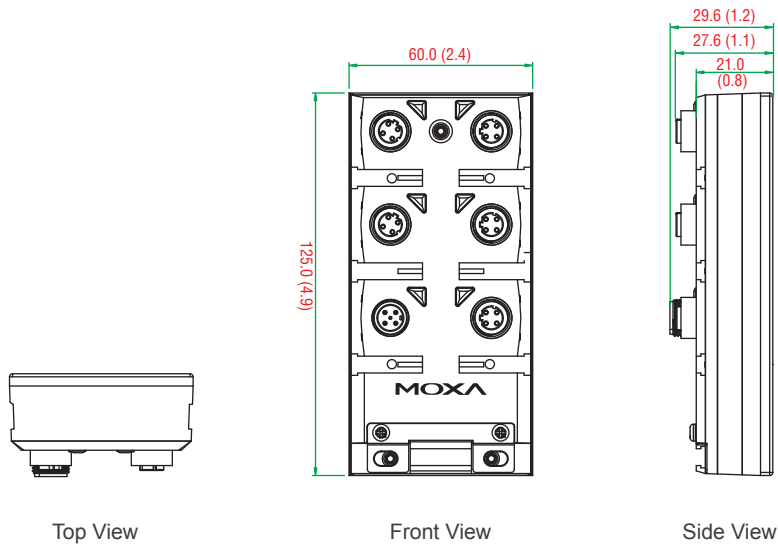Note: Please check Moxa's website for the most up-to-date certification status.

Warranty
Warranty Period: 5 years
Details: See www.moxa.com/warranty

Dimensions

Unit: mm (inch)

60.0 (2.4)

125.0 (4.9)

29.6 (1.2)
27.6 (1.1)
21.0 (0.8)

MOXA

Top View | Front View | Side View

: Ordering Information

Available Models		Port Interface
Standard Temperature (-25 to 60°C)	**Wide Temperature (-40 to 75°C)**	**10/100BaseT(X), M12 connector**
TN-5305	TN-5305-T	5

Note: Comformal coating is available on request.

Optional Accessories (can be purchased separately)
DR-4524/75-24/120-24: 45/75/120 W DIN-Rail 24 VDC power supplies
Power Cords, M12 Connectors, Protective Caps: See page 2-22
DK-M12-305: DIN-Rail mounting kit

Package Checklist
- TN-5305 switch
- 3 protective caps for unused ports and 8 port labels
- Panel mounting kit
- Documentation and software CD
- Hardware installation guide
- Warranty card

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