

# EN50155 Compact Size 8-port unmanaged Ethernet switch NM2050-M12



## Features

- EN50155-compliant Ethernet switch for rolling stock application
- Support auto-negotiation and auto-MDI/MDI-X
- Support store and forward transmission
- Support of flow control
- Ultra-rugged enclosure for mission-critical applications
- Wall mounting enabled

## Overview

NM2050-M12 Ethernet switches are designed for railway applications. The device is an unmanaged Ethernet switch with 8x10/100Base-T(X) ports, has the EN50155 certification. The switch is made of a rugged aluminum case and designed with Ethernet ports (M12-type connector), which provide a dust-proof connection. The Ethernet switch use M12 connectors to ensure tight, robust connections reliable operation against environmental disturbances, such as vibration and shock. In addition, the wide range of operating temperatures from -40 °C to 70°C can satisfy most of operating environments.

## Physical Ports

- 10/100 Base-T(X) Ports in M12 Auto MDI/MDIX: 8xM12 connector (D-coding)

## Technology

- Ethernet Standards:
  - IEEE 802.3 for 10Base-T;
  - IEEE 802.3u for 100Base-TX;
  - IEEE 802.3x for Flow control.
- MAC Table: 8192 MAC addresses
- Priority Queues: 4
- Processing: Store-and-Forward

## LED Indicators

- Power Indicator: Green: Power LED
- Fault Indicator: Amber : Indicate power failure event
- 10/100Base-T(X) M12 Port Indicator: Green for port Link/Act. Amber for Duplex/Collision

## Power

- Input Power: 12~48 V DC on M12 connector
- Power Consumption (Typ.): 4.32 Watts
- Overload Current Protection: Present
- Reverse Polarity Protection: Present

## Physical Characteristic

- Enclosure: IP-40
- Dimension (W × D × H):  
88.9 (W) × 40(D) × 178.2 (H) mm
- Weight (g): 510

## Environmental

- Storage Temperature: -40 to 85°C (-40 to 185°F)
- Operating Temperature: -40 to 70°C (-40 to 158°F)
- Operating Humidity: 5% to 95%, Non-condensing

## Regulatory approvals

- EMI: FCC Part 15, CISPR (EN55022) class A, EN50155 (EN50121-3-2, EN55011, EN50121-4)
- EMS: EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-9, EN61000-4-11
- Shock: IEC60068-2-27, EN61373
- Free Fall: IEC60068-2-32
- Vibration: IEC60068-2-6, EN61373
- Safety: EN60950-1

## Warranty

- 3 years



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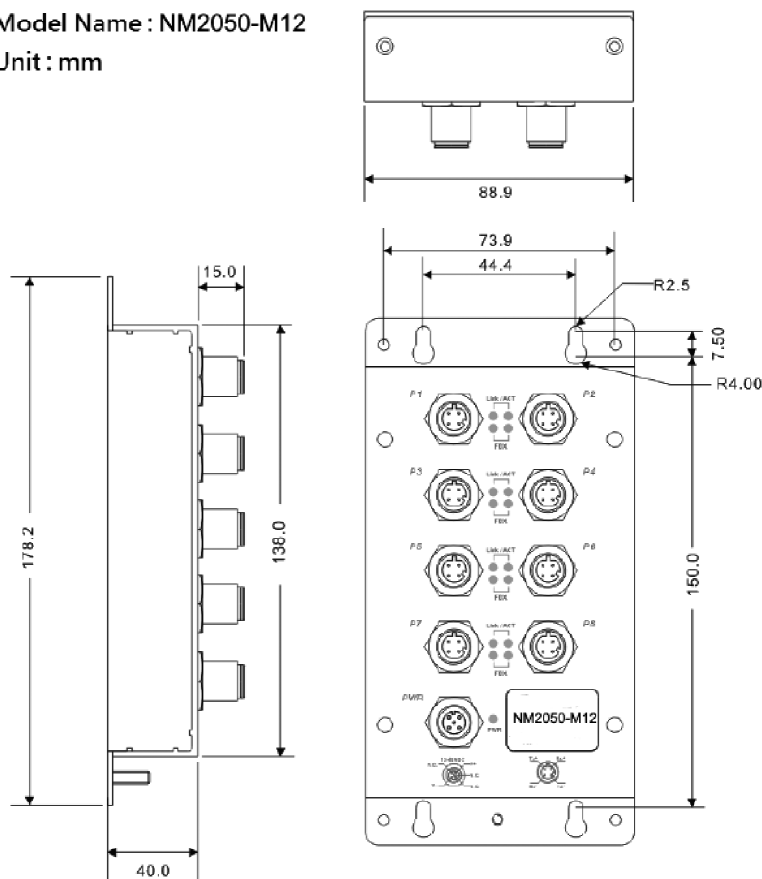
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## Board Layout

Model Name : NM2050-M12

Unit : mm



## Ordering Information

### NM2050-M12 Configuration

#### NM2050-M12

##### Configurations

EN50155 compact size 8-port unmanaged Ethernet switch with 8x10/100Base-T(X), M12 connector

##### Delivery checklist

NM2050-M12 delivery checklist contains:

1. NM2050-M12, 8-port unmanaged Ethernet switch
2. Packaging

##### Optional accessories

1. DR-45 series: 45 Watts DIN-Rail power supply
2. DR-120 series: 120 Watts DIN-Rail power supply
3. DR-75 series: 75 Watts DIN-Rail power supply

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Product specifications are subject to change without notice

## Corporate Offices

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