

TES-1080-M12

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

Features

- Industry-leading EN50155-compliant Ethernet switch for railway applications
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store-and-forward transmission
- Supports flow control
- Warning system by relay output
- Ultra-rugged enclosure for toughest industrial usages
- M12 connectors to guarantee reliable operation against environmental disturbances
- Dual wide-range power inputs on the M23 connector: 12~48VDC
- Wall mounting enabled



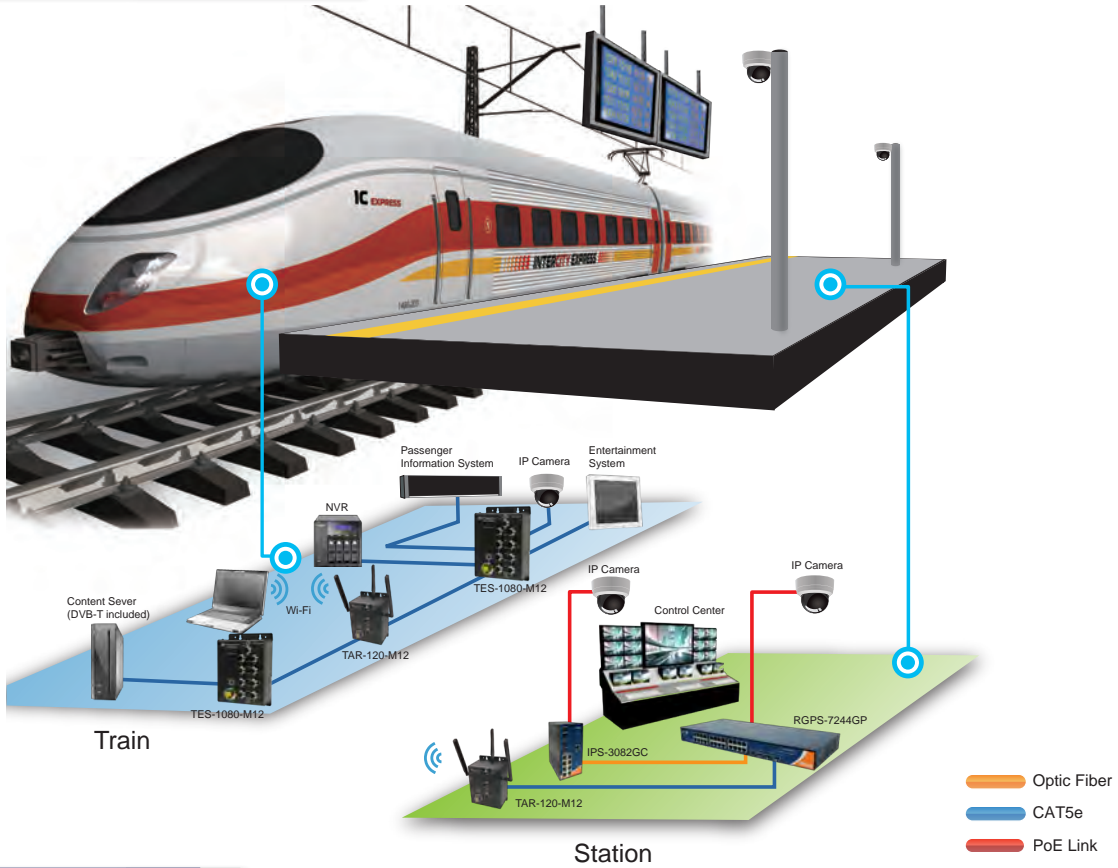
 **Transporter Series**



Introduction

ORing's Transporter™ series Ethernet switches are designed for industrial applications, such as rolling stock, vehicle, and railway applications. The TES-1080-M12 is an unmanaged Ethernet switch with 8x10/100Base-T(X) ports with EN50155 certification. TES-1080-M12 rugged IP-40 aluminum enclosure. All Ethernet ports on TES-1080-M12 are implemented with M12 connectors to ensure dust-tight connection, and to guarantee reliable operation against environmental disturbances, such as vibration and shock. In addition, the wide operating temperature range from -40°C to 70°C can satisfy most of tough operating environments. Therefore, the switch is one of the most reliable choices for rolling stock Ethernet application.

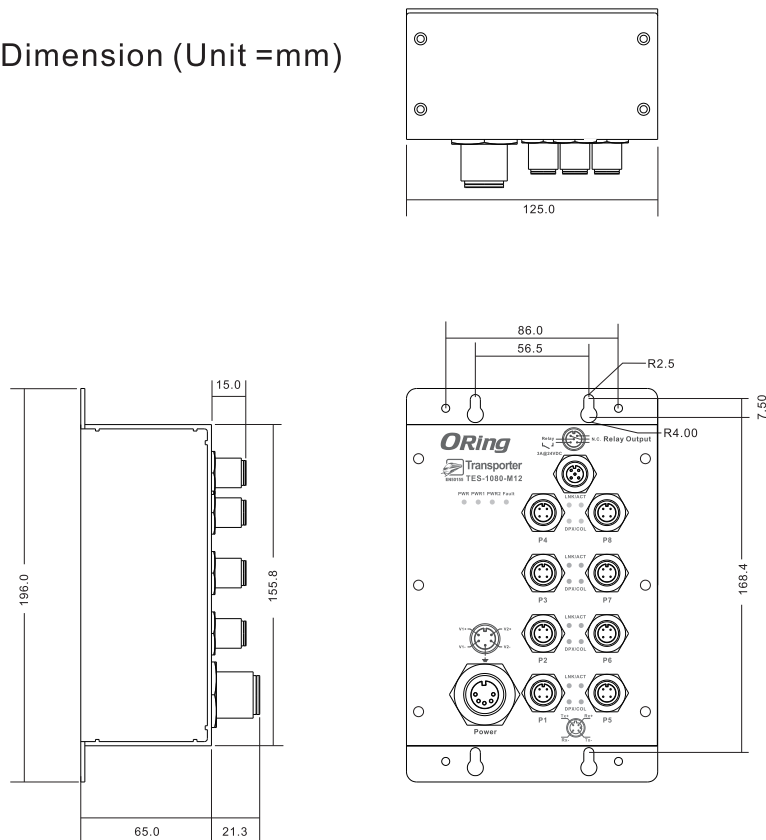
Practical Operation



Industrial Ethernet Switch

Dimensions

Dimension (Unit =mm)



(Unit=mm)

Specifications

| ORing Switch Model | TES-1080-M12 |
|--|---|
| Physical Ports | |
| 10/100 Base-T(X) Ports in M12 (D-coding) Auto MDI/MDIX | 8 x M12 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 |
| Processing | Store-and-Forward |
| LED Indicators | |
| Power Indicator | Green : Power LED x 2 |
| Fault Indicator | Amber : Indicate power failure event |
| 10/100Base-T(X) M12 Port Indicator | Green for port Link/Act. Amber for Duplex/Collision |
| Fault Contact | |
| Relay | Relay output to carry capacity of 3A at 24VDC (M12 connector with D-coding) |
| Power | |
| Redundant Input Power | Dual 12~48VDC on M23 connector |
| Power Consumption (Typ.) | 5 Watts |
| Overload Current Protection | Present |
| Reverse Polarity Protection | Present |
| Physical Characteristics | |
| Enclosure | IP-40 |
| Dimensions (W x D x H) | 125 (W) x 65 (D) x 196 (H)mm |
| Weight (g) | 831 g |
| Environmental | |
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Temperature | -40 to 70°C (-40 to 158°F) |
| 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 | 5 years |

Ordering Information

TES-1 **AA** **B** -M12

| Code Definition | 10/100Base-T(X) Port Number | Additional Port Number |
|-----------------|-----------------------------|------------------------|
| Option | - 08 : 8 ports | - 0 : 0 port |

| Available Model | Model Name | Description |
|-----------------|--------------|--|
| | TES-1080-M12 | EN50155 8-port unmanaged Ethernet switch with 8x10/100Base-T(X), M12 connector |

Packing List

- TES-1080-M12
- Quick Installation Guide

Optional Accessories (Can be purchased separately)

- DR-45 series : 45 Watts DIN-Rail power supply
- DR-75 series : 75 Watts DIN-Rail power supply
- DR-120 series : 120 Watts DIN-Rail power supply