



TES-1080-M12

# TES-1080-M12

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

## Features

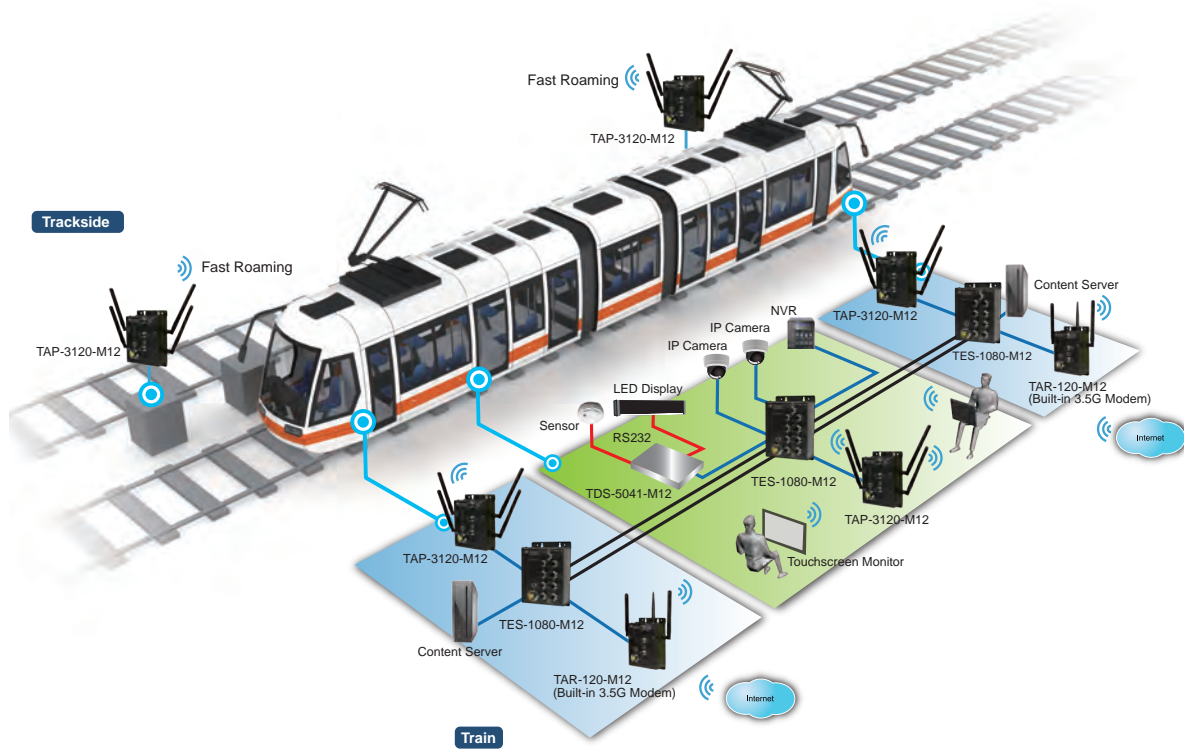
- Industry-leading EN50155-compliant Ethernet switch for railway applications
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store-and-forward transmission
- Supports flow control
- Warning system by relay output
- Ultra-rugged enclosure for toughest industrial usages
- M12 connectors to guarantee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



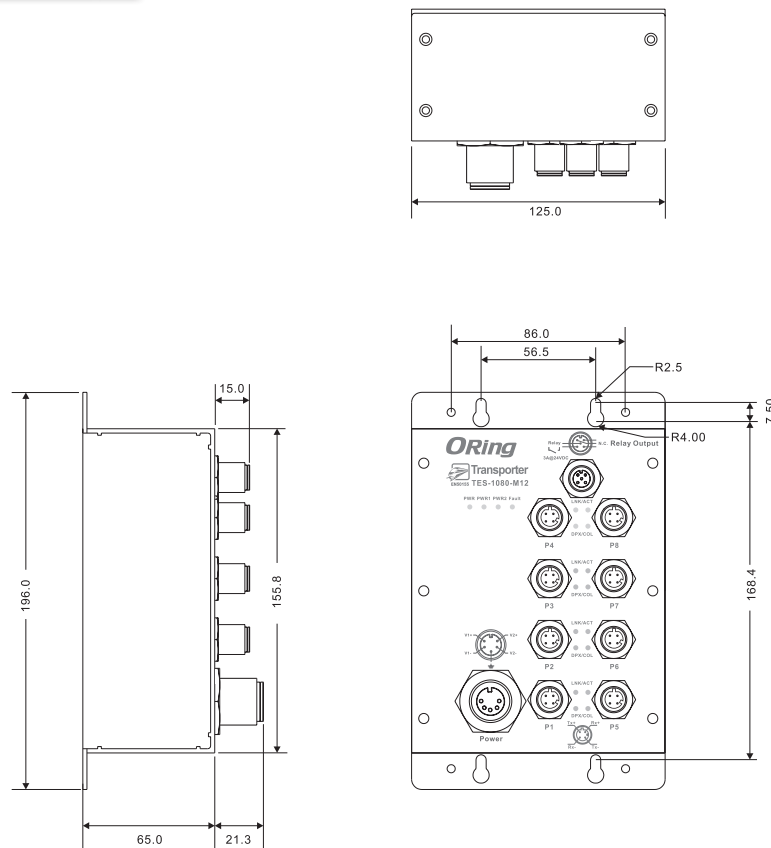
## Introduction

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



## Dimensions



(Unit=mm)

## Specifications

ORing Switch Model	TES-1080-M12
<b>Physical Ports</b>	
10/100 Base-T(X) Ports in M12 (D-coding) Auto MDI/MDIX	8 x M12 connector (D-coding)
<b>Technology</b>	
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
<b>LED Indicators</b>	
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
<b>Fault Contact</b>	
Relay	Relay output to carry capacity of 3A at 24VDC (M12 connector with A-coding)
<b>Power</b>	
Redundant Input Power	Dual 12~48VDC on M23 connector
Power Consumption (Typ.)	5 Watts
Overload Current Protection	Present
Reverse Polarity Protection	Present
<b>Physical Characteristics</b>	
Enclosure	IP-40
Dimensions (W x D x H)	125 (W) x 65 (D) x 196 (H)mm (4.92 x 2.56 x 7.72 inch)
Weight (g)	831 g
<b>Environmental</b>	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 70°C (-40 to 158°F)
<b>Regulatory Approvals</b>	
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
<b>Option</b>	- <b>08</b> : 8 ports	- <b>0</b> : 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
- SDR-240-48, 240W DIN-Rail power supply
- SDR-480-48, 480W DIN-Rail power supply
- M12C : M12 cable accessories