# 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











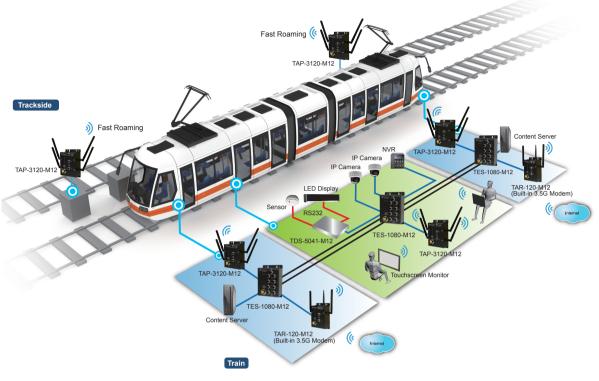


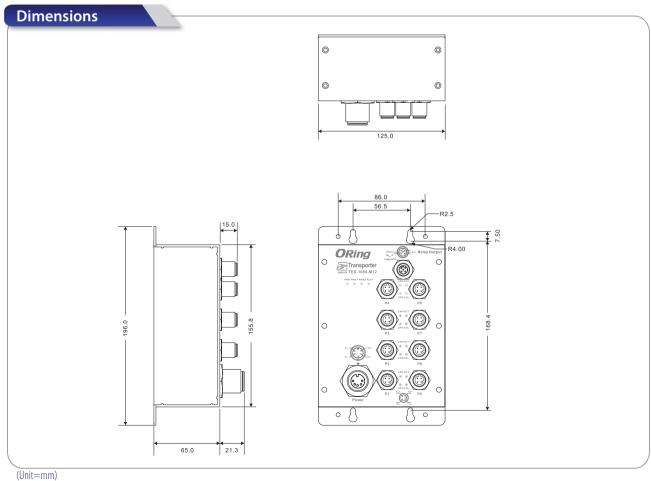


#### Introduction

ORing's Transporter<sup>TM</sup> 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**





# 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 A-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 (4.92 x 2.56 x 7.72 inch)
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**



Code Definition	10/100Base-T(X) Port Number	Additional Port Number
Option	- <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