

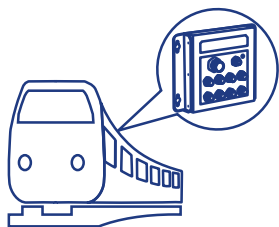


## 8-Port Industrial EN50155 M12 Gigabit PoE+ Railway Switch

TI-TPG80 (v1.0R)

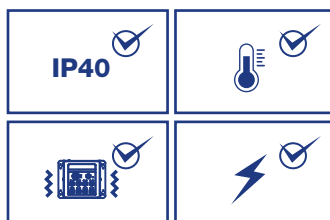
- 8 x M12 Gigabit PoE+ ports
- PoE power budget: 200W@48V DC; 100W@24V DC
- EN50155 compliant for rolling stock and railway applications
- Hardened IP40 rated metal housing
- 16Gbps switching capacity
- Includes wall mount brackets
- Operating temperature range of -40° – 75° C (-40° – 167° F)
- Dual redundant power inputs with overload current protection
- Alarm relay triggered by power failure
- Power supply sold separately (models: )
- M12 and M23 cables sold separately (models: TI-TCD02 / TI-TCD06 / TI-TCP02 / TI-TCR02)
- Limited Lifetime Warranty\*

TRENDnet's 8-Port Industrial EN50155 M12 Gigabit PoE+ Railway Switch, model TI-TPG80, has eight M12 gigabit PoE+ ports with a total PoE budget of up to 200W. This M12 railway switch is equipped with an IP40 rated metal enclosure, designed to withstand a high degree of vibration and shock, while operating within a wide temperature range of -40° – 75° C (-40° – 167° F) for industrial EN50155 applications. This industrial M12 switch supports an input voltage range from 24 – 56V DC with M23 power interface and M12 alarm relay interfaces for moving bus, train, and other rolling stock applications. Designed and tested for transportation and telco applications.



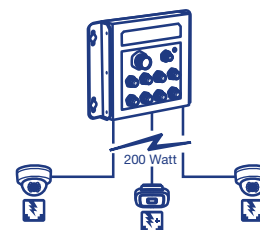
## EN50155 Compliant

This M12 switch supports an input voltage range from 24 – 56V DC with M23 power and M12 alarm relay interfaces for moving bus, train, and other rolling stock applications.



## Industrial Design

Equipped with an IP40 rated metal enclosure, the M12 switch is designed to withstand a high degree of vibration and shock, while operating within a wide temperature range of -40° – 75° C (-40° – 167° F) for industrial environments.

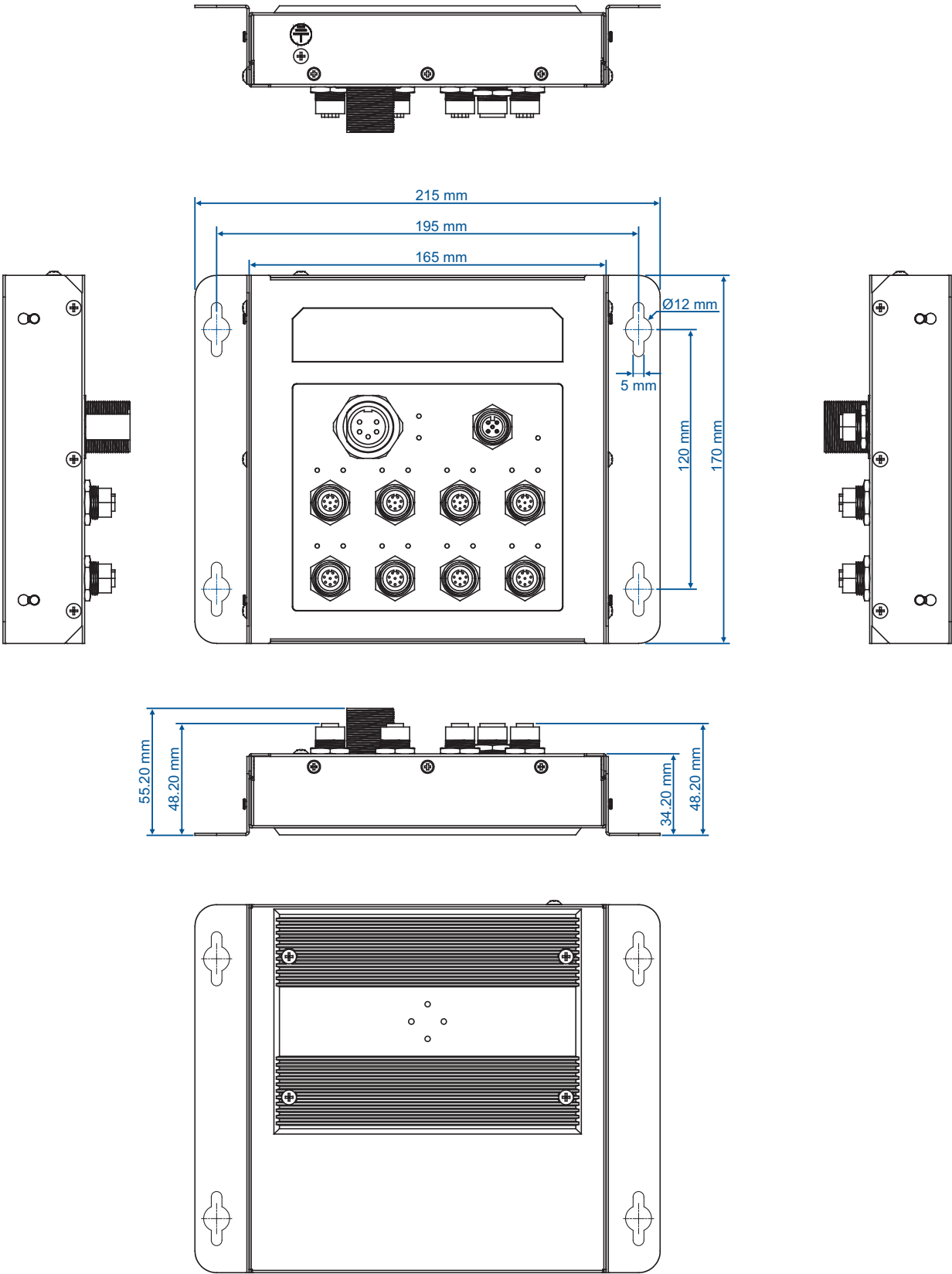


## Power over Ethernet (PoE+)

Eight M12 gigabit PoE+ ports deliver up to 30W of PoE+ power per port with a total power budget of 200W@48V DC, or 100W@24V DC.

## NETWORKING SOLUTION





## FEATURES



### Power over Ethernet (PoE+)

Eight M12 gigabit PoE+ ports deliver up to 30W of PoE+ power per port with a total power budget of 200W@48V DC, or 100W@24V DC



### Switching Capacity

16Gbps switching capacity



### Jumbo Frame

Sends larger packets, or Jumbo Frames (up to 10KB), for increased performance



### EN50155 Compliance

This industrial M12 switch certified for rail (EN 50155 / EN 50121-3) and (EN 50155 / EN 50121-4)



### Shock and Vibration Resistant

Rated for shock (EN 60068-2-27), freefall (EN 60068-2-32), and vibration (EN 60068-2-6)



### Wall Mount

IP40 rated metal enclosure, includes wall mounting brackets for the industrial M12 switch



### Wide Temperature Range

A wide operating temperature range of -40° – 75° C (-40° – 167° F) allows for installations in extreme hot or cold environments



### Power

Supports an input voltage range from 24 – 56V DC with M23 power and M12 alarm relay interfaces for moving bus, train, and other rolling stock applications.



### Grounding Point

Grounding point protects the M12 switch from external electrical surges

## SPECIFICATIONS

### Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3x
- IEEE 802.3af
- IEEE 802.3at

### Device Interface

- 8 x 8-pin M12 Gigabit PoE+ ports
- 1 x 5-pin M23 power port
- 1 x 5-pin M12 relay port
- LED indicators
- Wall mount
- Grounding point

### Data Transfer Rate

- Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex)
- Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex)
- Gigabit: 2000 Mbps (full duplex)

### Performance

- Data RAM Buffer: 2MB
- Switching Fabric: 16Gbps
- MAC Address Table: 11K entries
- Jumbo Frame: 10KB
- Forwarding rate: 11.9Mpps (64-byte packet size)

### Special Features

- Hardened components rated for extreme temperatures
- Built-in M23 interface for redundant power
- Support alarm relay
- Built-in voltage booster for 24V DC environment
- Auto-Negotiation
- Auto store and forward architecture
- Automatic address learning and address aging
- 6kV ESD protection

### DC Power

- Input: 24 – 56V DC
- Max. consumption: 5W (without PoE)

### PoE Budget

- 100W @ 24V DC
- 200W @ 48V DC

### Alarm Relay Contact

- Relay outputs with current carrying capacity of 1A, 24V DC
- Open circuit mode when P1/P2 are connected
- Short circuit mode when one power source is connected

### MTBF

- 500,000 hours

### Housing

- IP40 metal housing
- Wall mount
- Grounding point
- 6kV ESD protection

### Operating Temperature

- -40° – 75° C (-40° – 167° F)

### Operating Humidity

- Max. 95% non-condensing

### Dimensions

- 215 x 170 x 56mm (8.5 x 6.7 x 2.2 in.)

### Weight

- 1.32kg (2.9 lbs)

### Certifications

- CE
- FCC
- IEC EN 60950-1
- Shock EN 60068-2-27
- Freefall EN 60068-2-32
- Vibration EN 60068-2-6
- RailRoad EN 50155 / EN 50121-3
- RailRoad EN 50155 / EN 50121-4

### Warranty

- Limited Lifetime Warranty\*

### Package Contents

- TI-TPG80
- Quick Installation Guide
- Wall mount kit

TRENDnet offers a limited lifetime warranty for all of its metal-enclosed network switches that have been purchased in the United States/Canada on or after 1/1/2015. Cooling fan and internal power supply carry a one-year warranty.

Information provided in this document pertain to TRENDnet products and is subject to change at any time, without notice.