

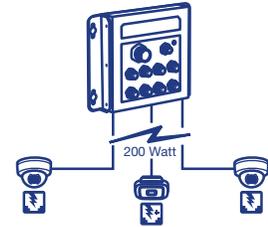
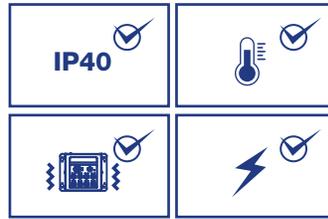
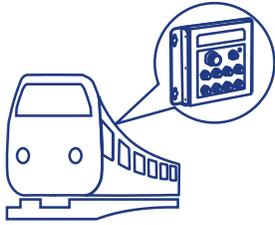


8-Port Industrial EN50155 M12 Gigabit PoE+ Railway Switch

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)

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.

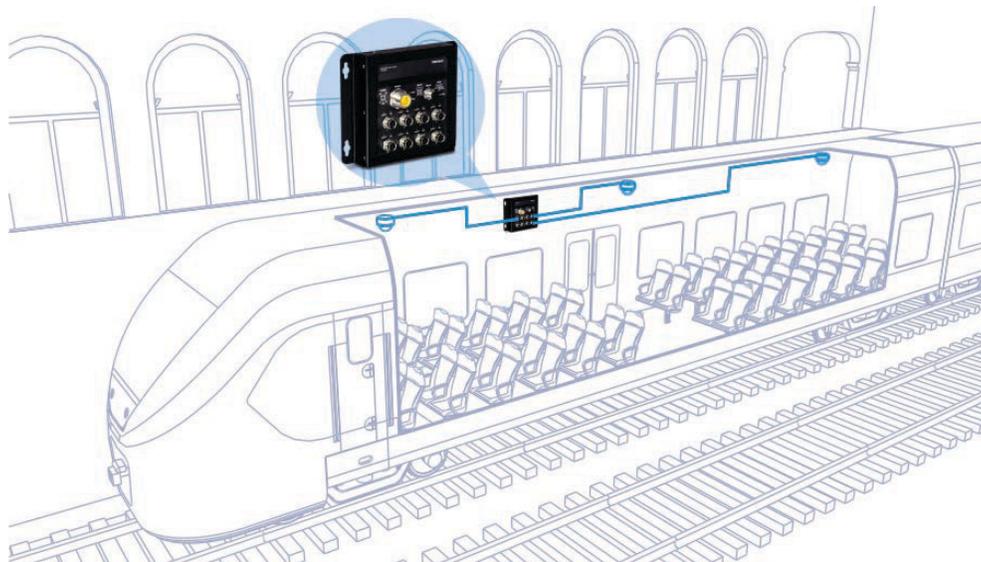
Industrial Design

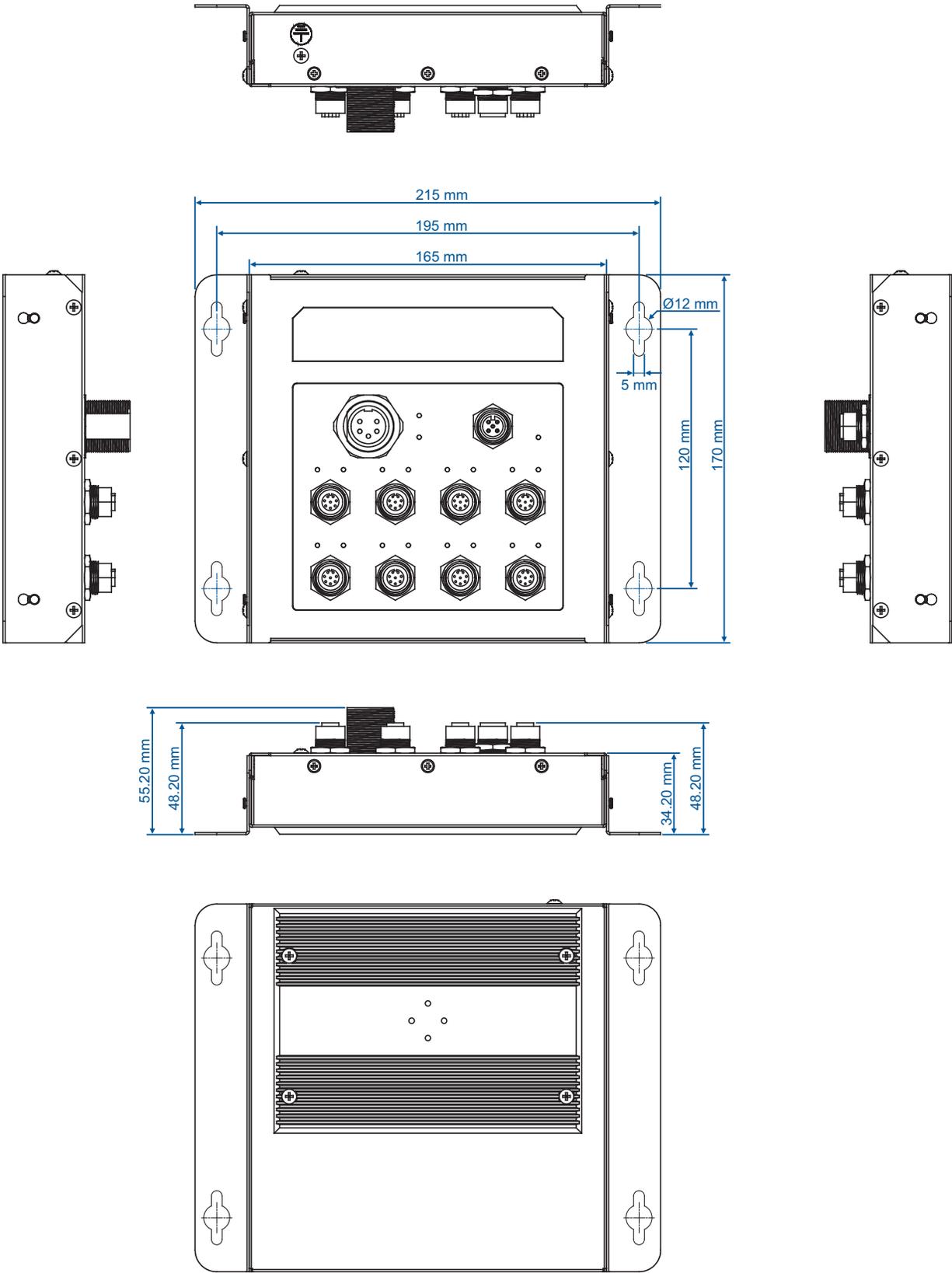
Equipped with an IP40 rated metal enclosure, the M12 switch is designed to withstand a high degree of vibration and shock, while operating within a wide temperature range of -40° – 75° C (-40° – 167° F) for industrial environments.

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

- 3-year warranty

Package Contents

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