



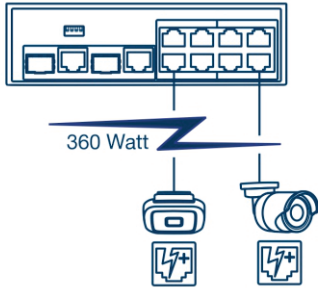
## 10-Port Industrial Gigabit PoE++ DIN-Rail Switch

TI-BG104 (v1.0R)

- 4 x Gigabit PoE++ ports
- 4 x Gigabit PoE+ ports
- 2 x Gigabit Share ports (SFP or RJ-45)
- 360W power budget
- 20Gbps switching capacity
- Hardened IP30 rated metal switch
- Includes DIN-Rail and wall mounts
- Extreme operating temperature range of -40° – 75° C (-40° – 167° F)
- Dual power inputs for redundancy
- Alarm output triggered by power failure
- Power supply sold separately (TI-S48048)

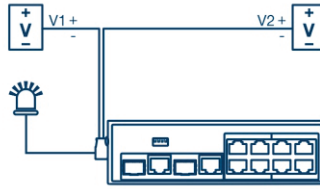
TRENDnet's Industrial Gigabit PoE++ DIN-Rail Switches delivers network connectivity to rugged environments, while saving you on installation costs and setup time using Power over Ethernet technology. The industrial PoE++ switches each feature a rugged IP30 rated metal enclosure, designed to withstand a high degree of vibration and shock, while operating in both high and low temperatures for industrial environments within -40° – 75° C (-40° – 167° F). These hardened industrial PoE++ switch models feature copper Gigabit PoE+ ports for high-speed device connections, and SFP slots that support 1000Base-FX modules for long distance fiber networking applications.

Installers and integrators can save on equipment costs and reduce installation time with TRENDnet's Industrial Gigabit PoE++ DIN-Rail Switches by delivering up to 90W per port of PoE power and data over existing Ethernet cables. With PoE technology inside these industrial PoE++ switches, users only need one set of cables to deliver both data and power. Easily network PoE devices to this hardened industrial PoE+ switch, such as high-power wireless access points, IP cameras, VoIP phone systems, IPTV decoders, and access controls.



### PoE++

A 360W PoE power budget supports up to eight Power over Ethernet devices with PoE (15.4W), PoE+ (30W), or PoE++ (90W) power.



### Redundant Power

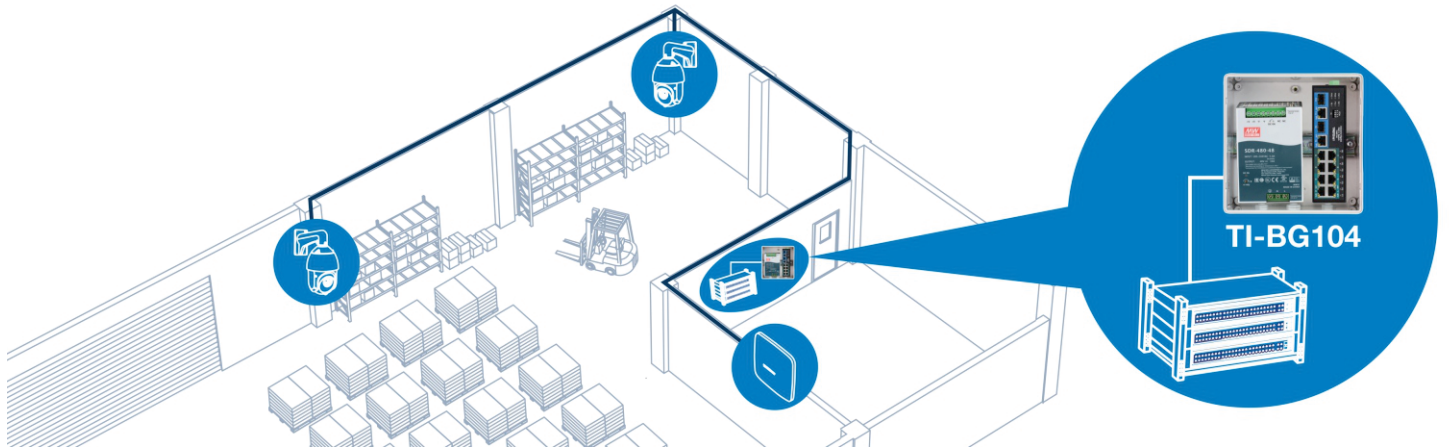
Multiple power inputs provide redundant power with overload current protection, minimizing network downtime (power supplies sold separately).



### Industrial Hardened Design

Rugged IP30 enclosure with a high degree of vibration and shock resistance, ESD/EMI/surge protection, and a wide operating temperature range (-40° – 75° C (-40° - 167° F)).

## NETWORKING SOLUTION



## FEATURES



### PoE Power Budget

A 360W PoE power budget on this industrial 802.3bt PoE++ switch supports up to eight Power over Ethernet devices with PoE (15.4W), PoE+ (30W), or PoE++ (90W) power



### Network Ports

4 x Gigabit PoE++ ports (802.3bt PoE++ ports), 4 x Gigabit PoE+ ports, and 2 x Gigabit share ports (SFP or RJ-45)



### DIN-Rail/Wall Mounts

IP30 rated metal enclosure with included DIN-Rail and wall mount hardware



### Switching Capacity

20Gbps switching capacity



### Redundant Power

Dual power inputs for redundancy with overload current protection (power supplies sold separately, model TI-S48048)



### Alarm Relay

Industrial PoE++ switch's alarm relay is triggered by power failure of primary and/or redundant power



### Jumbo Frame

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



### Rated for Extreme Environments

Rugged IP30 rated enclosure designed to withstand a high degree of vibration and shock, and operate within a wide temperature range (-40° - 75° C (-40° - 167° F)) for harsh environments



### Shock and Vibration Resistant

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



### Grounding Point

Grounding point on the industrial PoE++ switch protects equipment against external electrical surges

- 1 2 x Gigabit share SFP slots
- 2 2 x Gigabit share port
- 3 4 x Gigabit PoE++ ports
- 4 4 x Gigabit PoE+ ports
- 5 LED indicators
- 6 DIP Switch
- 7 AC Power
- 8 6-pin removable terminal block
- 9 Grounding point
- 10 DIN-Rail mount



## SPECIFICATIONS

### Standards

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

### Device Interface

- 4 x Gigabit PoE++ ports
- 4 x Gigabit PoE+ ports
- 2 x Gigabit share port
- 2 x Gigabit share SFP slots
- 6-pin removable terminal block
- LED indicators
- DIN-Rail mount
- Wall mount
- Grounding point

### Data Transfer Rate

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

### Performance

- Data RAM Buffer: 2MB
- Switching Fabric: 20Gbps
- MAC Address Table: 11K entries
- Jumbo Frame: 10KB
- Forwarding rate: 8.9Mpps (64-byte packet size)

### Special Features

- Hardened components rated for extreme temperatures
- Multiple power inputs
- Auto-Negotiation
- Auto store and forward architecture
- Automatic address learning and address aging
- ESD 8KV protection

### DC Power

- Input: 48 - 56V DC
- Compatible power supply: TI-S24048, TI-S48048 (sold separately)
- Max. consumption: 6.2W (no PD)

### AC Power

- Input 100 – 240V AC, 50/60Hz, 2A
- Compatible power adapter: 48VDC3000 (sold separately)
- Output: 48C DC, 3.34A 160W max.

### PoE

- PoE: up to 15.4W per port
- PoE+: up to 30W per port
- PoE++: up to 90W per port
- Power budget: 360W

### Terminal Block

- Redundant power inputs, alarm relay contact, 6 pin
- Wire range: 0.34mm<sup>2</sup> to 2.5mm<sup>2</sup>
- Solid wire (AWG): 12-24/14-22
- Stranded wire (AWG): 12-24/14-22
- Torque: 5 lb. – In / 0.5Nm / 0.56 Nm
- Wire strip length: 7-8mm

### DIP Switch

- 5: bt (sets port 5 in PoE++ mode), POH (sets port 5 in POH mode)
- 6: bt (sets port 6 in PoE++ mode), POH (sets port 6 in POH mode)
- 7: bt (sets port 7 in PoE++ mode), POH (sets port 7 in POH mode)
- 8: bt (sets port 8 in PoE++ mode), POH (sets port 8 in POH mode)

### Alarm Relay Contact

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

### MTBF

- 510,304 hours

### Housing

- IP30 metal case
- DIN-Rail mount
- Wall mount
- Grounding point
- 8KV ESD protection

### Operating Temperature

- - 40° – 75° C (-40 – 167° F)

### Operating Humidity

- Max. 95% non-condensing

### Dimensions

- 156 x 122 x 48mm (6.1 x 4.8 x 1.9 in.)

### Weight

- 630g (1.38 lb)

### Certifications

- CE
- FCC
- Shock (IEC 60068-2-27)
- Freefall (IEC 60068-2-32)
- Vibration (IEC 60068-2-6)
- IEC 61000-4-2
- IEC 61000-4-4
- IEC 61000-4-5

### Warranty

- Lifetime

### Package Contents

- TI-BG104
- Quick Installation Guide
- Removable terminal block
- DIN-Rail and wall mount kit

All references to speed are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.