TRENDnet®

9-Port Industrial 2.5G DIN-Rail PoE++ Switch with 10G SFP+ Port (24 – 57V)

TI-BG5091B (V1)

- 8 x 2.5G PoE++ ports
- 1 x 10G SFP+ port
- Up to 480W PoE power budget
- 60Gbps switching capacity
- Hardened IP50 rated metal switch
- Fast PoE minimizes wait time for powering up PoE devices
- Includes DIN-Rail and wall mounts
- Extreme operating temperature range of -40° – 75° C (-40° – 167° F)
- Multiple power inputs for redundancy
- Alarm output triggered by power failure
- Power supply sold separately (TI-S48048, TI-S24052, 48VDC3000)

TRENDnet's 9-Port Industrial 2.5G DIN-Rail PoE++ Switch with 10G SFP+ Port (24 – 57V), model TI-BG5091B, delivers network connectivity to rugged environments, while saving you on installation costs and setup time using Power over Ethernet technology. The industrial variable voltage switch features a rugged IP50 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). This adjustable voltage switch features eight 2.5G PoE++ ports, and a 10G SFP+ port for long-distance fiber networking applications.

Installers and integrators can save on equipment costs and reduce installation time with TRENDnet's voltage booster PoE++ switch by delivering up to 95W per port of PoE power and data over existing Ethernet cables. With PoE technology inside this industrial variable voltage switch, users only need one cable to deliver both data and power. The switch also features Fast PoE technology, which minimizes wait time for PoE devices by providing power immediately at boot up. Dual 24 – 57V DC power inputs on this adjustable voltage switch provide redundancy with power failure alarm relay.

PoE++
Up to a 480W PoE power budget supports up to eight Power over Ethernet devices with PoE (15.4W), PoE+ (30W), or PoE++ (95W) power.

Fault Tolerance
The industrial variable voltage switch features dual 24 – 57V DC power inputs for redundancy with overload current protection.

Industrial Hardened Design
Rugged IP50 enclosure with a high degree of vibration and shock resistance, ESD/EMI/surge protection, and a wide operating temperature range of -40° - 75° C (-40°- 167° F).

FEATURES

PoE Power Budget
Up to a 480W PoE power budget on this industrial variable voltage switch supports up to eight Power over Ethernet devices with PoE (15.4W), PoE+ (30W), or PoE++ (95W) power

Fast PoE
With Fast PoE, the industrial variable voltage switch provides power to a connected PoE device within a few seconds of the switch receiving power—no need to wait for the switch to fully boot up

Network Ports
8 x 2.5G PoE++ ports and 1 x 10G SFP+ port

DIN-Rail/Wall Mounts
Metal enclosure with included DIN-Rail and wall mount hardware

IP50 Housing
IP50 rated metal housing protects the industrial variable voltage switch from most environments with dust particles

Power Redundancy
The voltage booster PoE++ switch features dual 24 – 57V DC power inputs for redundancy with overload current protection

Alarm Relay
Alarm relay is triggered by power failure of primary and/or redundant power

Jumbo Frame
Sends larger packets, or Jumbo Frames (up to 12KB), for increased performance

Industrial Design
Rugged design to withstand a high degree of vibration and shock for harsh environments

Operating Temperature
Operates within an extreme temperature range of -40° - 75° C (-40° - 167° F)

Shock and Vibration Resistant
Rated for shock (IEC 60068-2-27), freefall (IEC 60068-2-31), and vibration (IEC 60068-2-6)

Grounding Point
Grounding point on the industrial variable voltage switch protects equipment against external electrical surges

TRENDnet®

NETWORKING SOLUTION

Grounding Point

Power Port

6-Pin Removable Terminal Block

1 x 10G SFP+ Port (1Gbps/10Gbps)

LED Indicators

8 x 2.5G PoE++ Ports (10Mbps/100Mbps/ 1Gbps/2.5Gbps)

PoE++ Camera

TI-BG5091B

Power Supply

TRENDnet®

SPECIFICATIONS

Standards
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3z
- IEEE 802.3x
- IEEE 802.3ae
- IEEE 802.3af
- IEEE 802.3an
- IEEE 802.3at
- IEEE 802.3bt
- IEEE 802.3bz

Device Interface
- 8 x 2.5G PoE++ ports (10Mbps/100Mbps/1Gbps/2.5Gbps)
- 1 x 10G SFP+ port (1Gbps/10Gbps)
- 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: 2Gbps (full duplex)
- 2.5 Gigabit: 5Gbps (full duplex)
- 1G Fiber: 2Gbps (full duplex)
- 10G Fiber: 20Gbps (full duplex)

Performance
- Data RAM Buffer: 1MB
- Switching Fabric: 60Gbps
- MAC Address Table: 4K entries
- Jumbo Frame: 12KB
- Forwarding rate: 44.64Mpps (64-byte packet size)

Special Features
- Hardened components rated for extreme temperatures
- Fast PoE
- Multiple power inputs
- Auto-Negotiation
- Support VLAN pass through
- Auto store and forward architecture
- Automatic address learning and address aging
- ESD 6kV protection

DC Power
- Input: 24 - 57V DC
- Compatible power supply: TI-S24052, TI-S48048 (sold separately)
- Max. consumption: 12.4W @24V (no PD)

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

PoE
- PoE: up to 15.4W per port
- PoE+: up to 30W per port
- PoE++: up to 95W per port
- Power budget: 240W @ 24V
- Power budget: 480W @ 56V

Terminal Block
- 6-pin terminal block
- Alarm relay contact
- Wire range: 0.34mm^2 to 2.5mm^2
- Solid wire (AWG): 14-18
- Stranded wire (AWG): 14-18
- Torque: 5 lb. – In / 0.5Nm / 0.56 Nm
- Wire strip length: 7-8mm

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
- 1,1160,603 hours @ 25°C

Housing
- IP50 metal case
- DIN-Rail mount
- Wall mount
- Grounding point
- 6kV ESD protection

Operating Temperature
- - 40° – 75° C (-40 – 167° F)

Operating Humidity
- Max. 95% non-condensing

Dimensions
- 134 x 124 x 73mm (5.3 x 4.88 x 2.87 in.)

Weight
- 1.4kg (3 lb.)

Certifications
- CE
- FCC
- LVD
- Shock (IEC 60068-2-27)
- Freefall (IEC 60068-2-31)
- Vibration (IEC 60068-2-6)
- IEC 61000-6-2
- IEC 61000-6-4
- IEC 61000-4-5

Warranty
- Lifetime

Package Contents
- TI-BG5091B
- 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.