6-Port Industrial Gigabit L2+ Managed PoE++ DIN-Rail Switch

TI-BG62i (v1.6R)

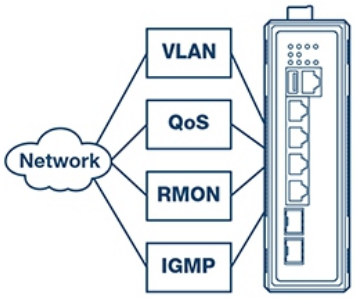
- 4 x Gigabit PoE++ ports
- 2 x SFP slots
- Supports 1000Base-FX fiber SFP modules
- 360W PoE power budget
- Perpetual PoE provides PoE power to connected devices at booting
- Fast PoE remembers per port PoE power draw of connected devices at booting
- PoE alive check restarts unresponsive PoE powered devices
- Remote cloud management with TRENDnet Hive (Additional fee applies)
- 12Gbps switching capacity
- Hardened IP40 rated metal housing
- Includes DIN-Rail mounting bracket
- Operating temperature range of -40° – 75° C (-40° – 167° F)
- Supports LACP, STP/RSTP, VLAN, and IGMP Snooping
- IEEE 802.1p QoS with queue scheduling support
- CLI (Console / Telnet / SSH), Web (HTTP / HTTPS), SNMP v1 / 2c / 3 management
- 802.1Q / Q-in-Q VLAN and IGMP Snooping / MLD / MVR support
- 802.1p / DSCP / Queue Scheduling (SPQ / WRR) QoS support
- Bandwidth control per port
- Dual inputs provide redundant power with overload current protection
- Alarm output triggered by power failure
- Supports Ethernet Ring Protection Switching (ERPSv2)
- Power supply sold separately (model: TI-S48048)

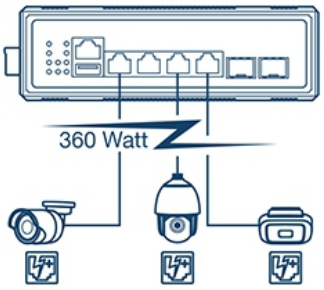
TRENDnet's Industrial Gigabit L2+ Managed DIN-Rail Switch series offers advanced layer 2 managed features with enhanced traffic controls to meet the evolving demands of today's SMB networks. Each industrial layer 2 managed switch is equipped with an IP40 rated metal enclosure, designed to withstand a high degree of vibration and shock, while operating within a wide temperature range of -40° – 75° C (-40° – 167° F) for industrial environments. Our industrial layer 2 managed switch models feature copper Gigabit ports for high-speed device connections, and SFP slots that support 1000Base-FX modules for long distance fiber networking applications.

These industrial layer 2 managed DIN-Rail switches provide an intuitive web-based management interface. Each TRENDnet industrial layer 2 managed switch supports advanced traffic management controls, troubleshooting, and SNMP monitoring. Advanced managed switch features include LACP to group ports together to increase bandwidth between switches, VLANs for segmenting and isolating virtual LAN groups, QoS for traffic prioritization, port bandwidth controls, and SNMP monitoring making each TRENDnet industrial layer 2 managed switch a powerful solution for SMB networks.

This industrial 802.3bt PoE++ switch has four gigabit PoE++ ports with a 360W PoE power budget, plus two SFP slots for long distance fiber applications. Advanced PoE technology supported includes Perpetual PoE, Fast PoE, and PoE Alive Check.

Easily manage and configure this switch remotely by updating the switch to the latest firmware for access to TRENDnet Hive. TRENDnet Hive is a network cloud manager that reduces management time and cost. No additional hardware, server, or personal cloud is required on these cloud managed switches with TRENDnet's reliable cloud service.





L2 Management

Provides an easy-to-use web management interface for traffic management controls, such as VLAN, QoS, access controls, link aggregation, troubleshooting, SNMP monitoring, and per port MAC restriction.

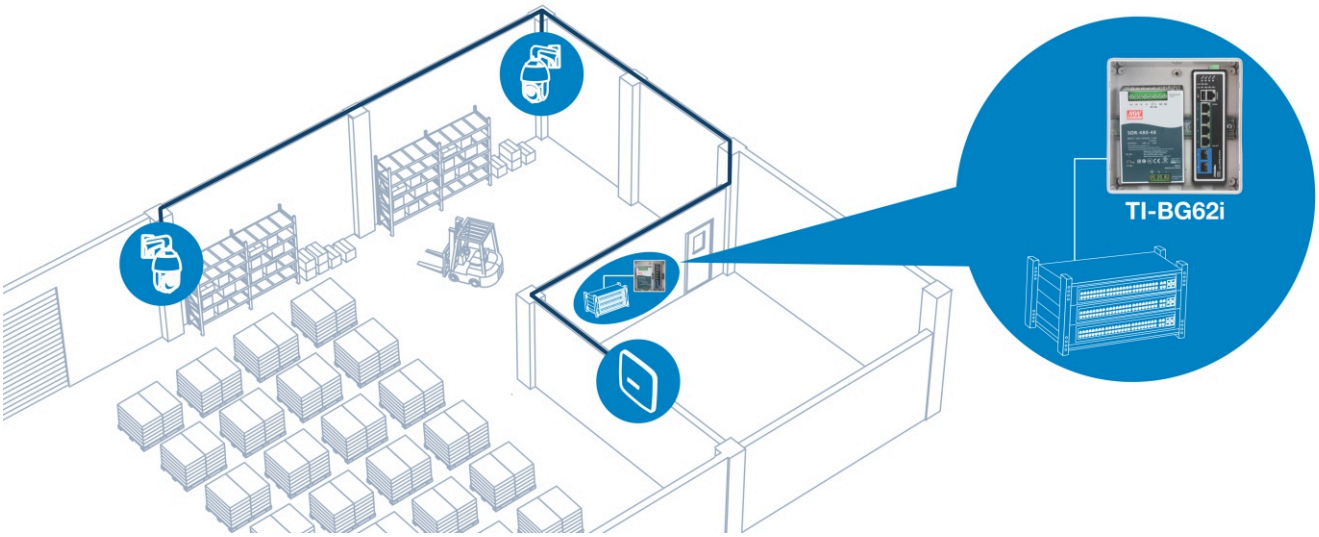
PoE Power

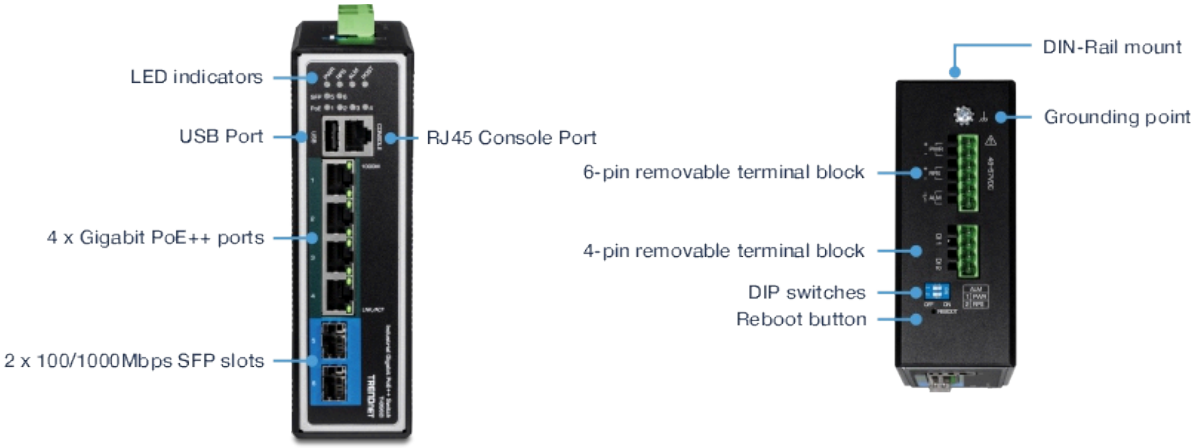
A 360W PoE power budget supplies up to eight Power over Ethernet devices. Features advanced PoE port controls, such as enabling / disabling PoE, power priority, PD alive check, and power scheduling.

Industrial Design

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

NETWORKING SOLUTION





FEATURES

Network Ports
This industrial 802.3bt PoE++ switch features four gigabit PoE++ ports, two gigabit SFP slots, a 12Gbps switching capacity, one console port (RJ-45 to RS-232) for out-of-band management, and one USB port (config backup/firmware upload)

PoE Power
Supports up to 95W of PoE++ power per port with a 360W total power budget

Full PoE Control Per Port
Available PoE port controls include enabling / disabling PoE, power priority, PD alive check, and power scheduling

Traffic Management
Managed features include 802.1Q / Q-in-Q / GVRP / MAC & Protocol-Based VLAN, IGMP v1 / 2 / 3, IGMP Snooping, MLD, MVR, per port bandwidth control / 802.1p / DSCP / Queue Scheduling (SPQ / WRR), STP / RSTP / MSTP spanning tree, static and dynamic link aggregation, Xpress Ring, and ERPS for flexible network integration

Layer 2 Management
The industrial PoE++ managed switch offers IPv4 / IPv6 static or DHCPv4 / v6 assignment, IPv4 / IPv6 static routing and proxy ARP, DHCP relay / option 82, and DHCP server snooping / screening to filter out unauthorized DHCP servers

Access Control
Managed access control features include ACLs, IP-MAC-Port binding, ARP inspection, 802.1X RADIUS, MAC address learning, DHCP snooping, and IP Source Guard provide layered network access controls

System Monitoring
Monitoring features include SNMP v1 / v2c / 3, MIB support, SNMP trap, RMON Groups (1, 2, 3, 9), SMTP alert, syslog, port mirroring, SFP DDMI, and ModBus / TCP

DIN-Rail Mount
The hardened PoE++ switch features an IP40 rated metal enclosure with integrated DIN-Rail mounting hardware

Switching Capacity
12Gbps switching capacity

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

Redundant Power
Dual power inputs on the industrial 802.3 bt PoE++ switch support overload current protection (power supply sold separately: TI-S48048)

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

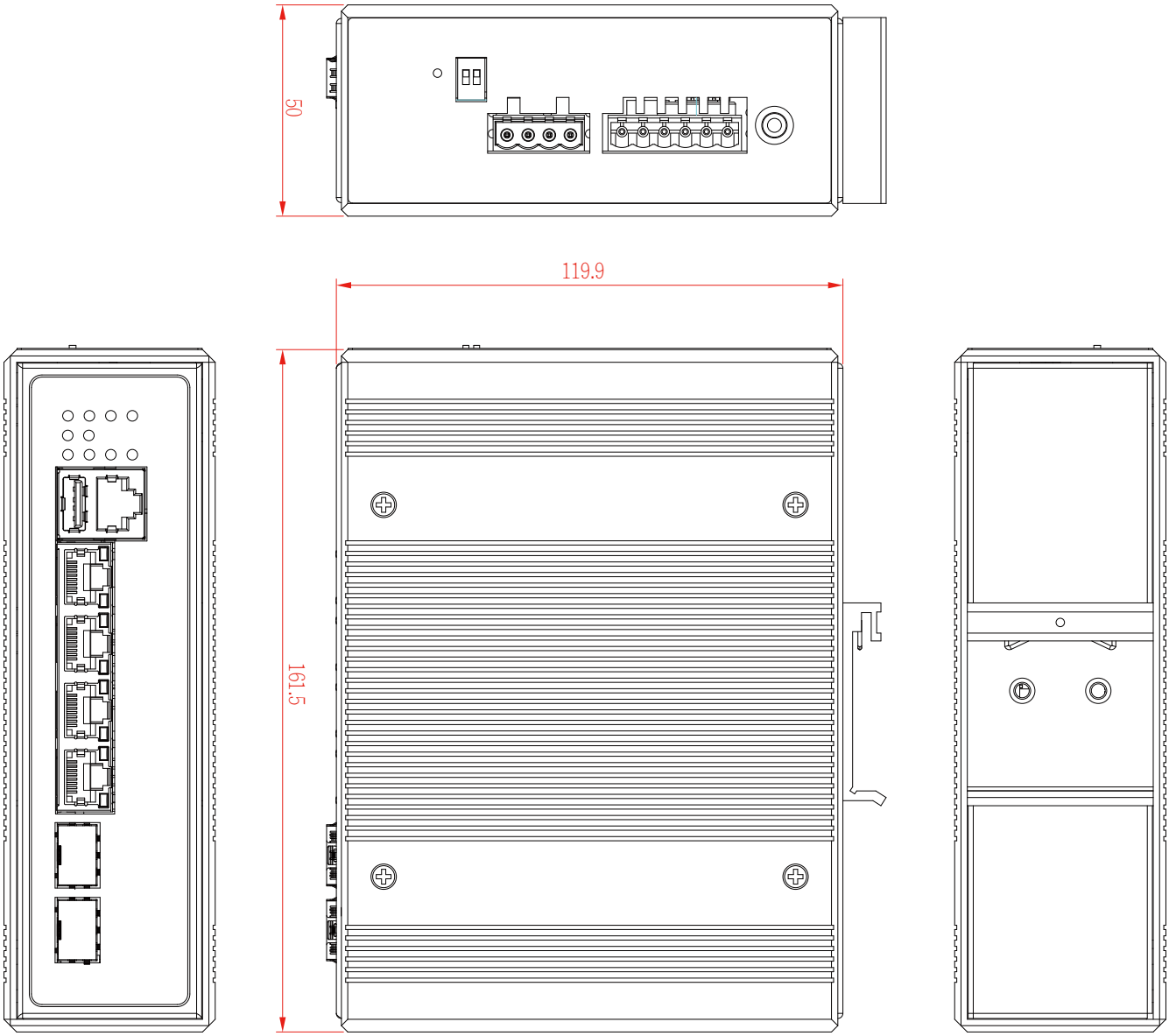
Grounding Point
Grounding point on the industrial 802.3 bt PoE++ switch protects equipment from external electrical surges

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

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

Hive Enabled
Remotely manage, configure, and diagnose this web smart switch via TRENDnet's cloud service (Additional fee applies)

DIMENSIONS (mm)



SPECIFICATIONS

Standards
- IEEE 802.1d
- IEEE 802.1p
- IEEE 802.1Q
- IEEE 802.1w
- IEEE 802.1X
- IEEE 802.1ab
- IEEE 802.1ax
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3z
- IEEE 802.3ab
- IEEE 802.3ad
- IEEE 802.3az
- IEEE 802.3af
- IEEE 802.3at
- IEEE 802.3bt

Device Interface
- 4 x Gigabit PoE++ ports
- 2 x 100/1000Mbps SFP slots
- DIP switches
- 6-pin removable terminal block (primary/RPS power inputs & alarm relay output)
- 4-pin removable terminal block (digital input/output)
- LED indicators
- Reboot button

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

Performance
- Switch fabric: 12Gbps
- RAM buffer: 1.5MB
- MAC address table: 16K entries
- Jumbo frames: 10KB
- Forwarding mode: store and forward
- Forwarding rate: 8.9Mpps (64-byte packet size)

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

Management
- HTTP web-based GUI
- CLI: Telnet / SSHv2
- SNMP v1, v2c, v3
- SNMP trap (up to 5 receivers)
- RMON groups 1/2/3/9
- Device configuration backup & restore, upgrade firmware, reboot, and reset to default
- Multiple administrative or read-only user accounts
- Enable or disable power saving mode per port
- Static MAC entries
- LLDP (Link layer discovery protocol)
- Netlite device map
- ONVIF device discovery
- SNTP
- SMTP alert
- Syslog
- Port statistics/utilization
- Traffic monitor
- Port mirror: one to one, many to one
- Storm control: Broadcast, multicast, destination lookup failure (Min. limit: 1pps)
- Loopback detection
- DHCP relay/option 82
- Xpress Ring
- ERPS (Ethernet Ring Protection Switching) G8032v2
- SFP DDMI (Digital Diagnostic Monitoring Interface)

MIB
- MIB II RFC 1213
- Bridge MIB RFC 1493
- RMON (Group 1,2,3,9) RFC 2819 RFC 1757

Spanning Tree
- IEEE 802.1d STP (spanning tree protocol)
- IEEE 802.1w RSTP (rapid spanning tree protocol)
- IEEE 802.1s MSTP (multiple spanning tree protocol)
- BPDU filter, guard, and root guard

Link Aggregation
- Static link aggregation and 802.3ad dynamic LACP (Up to 3 groups)

Quality of Service (QoS)
- 802.1p Class of service (CoS)
- DSCP (Differentiated Services Code Point)
- Bandwidth control per port
- Queue Scheduling: strict priority (SP), weighted round robin (WRR), weighted fair queuing (WFQ)

VLAN
- 802.1Q tagged VLAN
- MAC-based VLAN
- Port isolation
- Up to 256 VLAN groups, ID range 1-4094

Multicast
- IGMP snooping v1, v2, v3
- IGMP querier
- IGMP fast leave
- Up to 256 multicast groups
- Static multicast entries

Access Control
- 802.1X authentication (Local user database, RADIUS, guest VLAN assignment)
- DHCP snooping/screening
- Trusted host/IP access list for management access
- Port Security/MAC address learning restriction (Up to 100 entries per port)
- Static/dynamic ARP inspection

ACL
- Source/Destination MAC address
- Source/Destination IP address
- Source Interface
- VLAN ID
- EtherType
- TCP/UDP port 1-65535

Layer 3 Features
- IPv4 / IPv6 static routing
- IPv4 / IPv6 proxy ARP
- IP interfaces: Up to 16
- Routing table entries: Up to 500 (IPv4: 400 / IPv6: 100)
- DHCP Relay / Option 82

Special Features

- Netlite device discovery and map display in GUI
- Port security: MAC address learning restriction per port
- DHCP relay/option 82 & DHCP server snooping/ screening support
- Wide operating temperature range
- Dual redundant power inputs
- Alarm relay triggered by power failure
- Surge and ESD protection
- Fast PoE & Perpetual PoE

Power

- PWR (Primary) terminal input: 48 – 57V DC
- RPS (Redundant) terminal input: 48 – 57V DC
- Compatible power supply: TI-S12048 (120W), TI-S24048 (240W), TI-S48048 (480W) sold separately
- Max. Consumption: 20W (no PoE load), 380W (full PoE load)

Hive Cloud Management

- Configure, monitor, and manage through the TRENDnet Hive Cloud Management Portal remotely via PC or Mac web browser
- Multi-device management
- Provisioning through scheduled batch firmware or configuration updates for multiple switches
- Event/hardware network monitoring (CPU/ memory utilization)
- Enable & disable PoE, set PD (powered device) alive check, configure PoE scheduling, and monitor PoE budget utilization (for PoE switches only)
- Configure features such as IP address settings, VLANs, spanning tree, loopback detection, IGMP snooping, link aggregation, and bandwidth control through cloud management

PoE

- PoE budget: 360W@48V DC input,
- PoE++ (802.3bt): Up to 95W per port
- PoE++: mode A+ (1, 2, 3, 6) and mode B- (4, 5, 7, and 8) for power
- PoE auto classification
- PoE port priority/power scheduling/PD alive check
- Fast PoE/perpetual PoE
- Over current/short circuit protection

Terminal Block

- Redundant power inputs, alarm relay contact, 6 pin
- Wire range: 0.5 mm^2 to 2.5 mm^2
- Solid wire (AWG): 12-26
- Stranded wire (AWG): 12-26
- Wire strip length: 10-11mm

DIP Switch

Switch	Status	Function
1	OFF	Disable alarm relay for PWR power input
	ON	Enable alarm relay for power failure on PWR power input
2	OFF	Disable alarm relay for RPS power input
	ON	Enable alarm relay for power failure on RPS power input

Enclosure

- IP40 rated metal enclosure
- Fanless passive cooling
- DIN-Rail mount
- Grounding point
- ESD (Ethernet) Protection: 8KV DC
- Surge (Power) Protection: 6KV DC

MTBF

- 379,100 hours @ 25° C
- 48,624 hours @ 75° C

Operating Temperature

- -40° – 75° C (-40° – 167° F)

Operating Humidity

- Max. 95% non-condensing

Dimensions

- 170 x 118 x 50mm (6.69 x 4.65 x 1.97 in.)

Weight

- 956g (2.1 lbs.)

Certifications

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

Warranty

- Lifetime warranty

Package Contents

- TI-BG62i
- Quick Installation Guide
- Removable terminal block
- DIN rail mounting bracket

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.

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