# 7-Port Industrial Gigabit L2 Managed PoE+ DIN-Rail Switch 24 – 57V

TI-PG743Bi (v1.xR)

- 4 x Gigabit PoE+ ports
- 1 x Gigabit port
- 2 x SFP ports
- Supports 100/1000Base-FX fiber SFP modules
- PoE power budget: 120W@48V DC or 120W@24V DC
- PoE alive check restarts unresponsive PoE powered devices
- 14Gbps 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
- Bandwidth control per port

- Remote cloud management with TRENDnet Hive™ (Additional fee applies)
- Single power input with overload current protection
- Supports Ethernet Ring Protection Switching (ERPSv2)
- Power supply sold separately (models: TI-S24048, TI-S24052, TI-S15052)
- Power adapter sold separately: 48VDC3000
- Lifetime Warranty
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's 7-Port Industrial Gigabit L2 Managed PoE+ DIN-Rail Switch, model TI-PG743Bi, features four Gigabit PoE+ ports with a 120W PoE budget, one gigabit port, and two SFP ports that support both 100Base-FX and 1000Base-FX modules for long-distance fiber applications. The hardened network 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. Advanced traffic management controls, troubleshooting, and SNMP monitoring support make this managed PoE+ switch a powerful solution for SMB networks.

Easily manage and configure TRENDnet's 7-Port Industrial Gigabit L2 Managed PoE+ DIN-Rail 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. This cloud managed switch requires no additional hardware, server, or personal cloud with TRENDnet's reliable cloud service
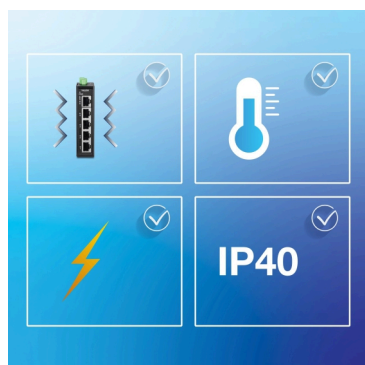
Integration Flexibility

Managed features include PoE control, VLAN, IGMP snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration.
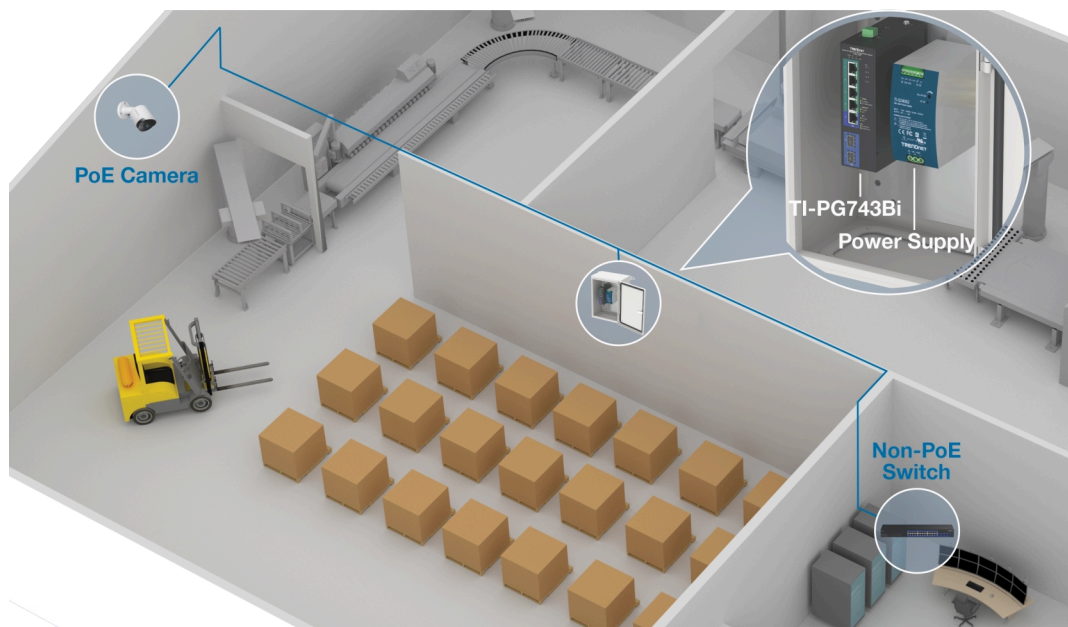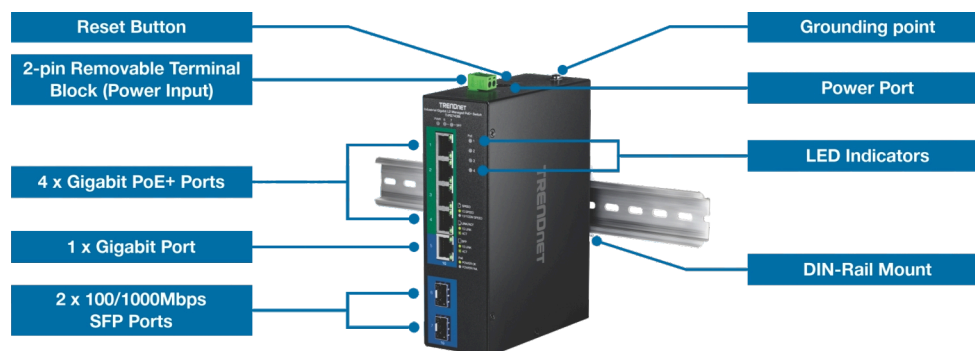
PoE Power

A 120W PoE power budget supplies up to four Power over Ethernet devices, and includes 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, while operating within a wide temperature range of -40° – 75° C (-40° – 167° F) for industrial environments.

NETWORKING SOLUTION

Reset Button

2-pin Removable Terminal Block (Power Input)

4 x Gigabit PoE+ Ports

1 x Gigabit Port

2 x 100/1000Mbps SFP Ports

Grounding point

Power Port

LED Indicators

DIN-Rail Mount

PoE Camera

TI-PG743Bi
Power Supply

Non-PoE Switch

FEATURES

Network Ports
4 x Gigabit PoE+ ports, 1 x Gigabit port, 2 x Gigabit SFP ports

PoE Power
Supplies up to 30W of PoE+ power per port with a 120W power budget

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

Hive Enabled
Remotely manage, configure, and diagnose this L2 switch via TRENDnet's cloud service (Additional fee applies)

Traffic Management
Managed features include 802.1Q, MAC & Port Isolation VLAN, IGMP Snooping, per port bandwidth control / 802.1p / DSCP / Queue Scheduling (SPQ / WRR), STP / RSTP, and link aggregation for flexible network integration

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 provides layered network access controls

System Monitoring
Monitoring features include SNMP v1 / v2c / v3, MIB support, SNMP trap, RMON Groups (1, 2, 3, 9), SMTP alert, syslog, port mirroring, and SFP DDMI

DIN-Rail Mount
IP40 rated metal enclosure includes DIN-Rail mounting bracket

Switching Capacity
14Gbps switching capacity

Single Power Input
Single power input (terminal or power adapter) with overload current protection (power supply sold separately: TI-S24048, TIS24052, TI-S15052) (power adapter sold separately: 48VDC3000)

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

Extreme 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)

Grounding Point
Grounding point protects equipment from external electrical surges

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

Device Interface
- 4 x Gigabit PoE+ ports
- 1 x Gigabit port
- 2 x 100/1000Mbps SFP ports
- 2-pin removable terminal block (power input)
- 4-pin DIN (power adapter input)
- LED indicators
- Reset button
- Ground terminal

Performance
- Switch fabric: 14Gbps
- RAM buffer: 512KB
- MAC address table: 8K entries
- Jumbo frames: 10KB
- Forwarding rate: 10.42Mpps (64-byte packet size)

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

Spanning Tree
- STP (spanning tree protocol)
- RSTP (rapid spanning tree protocol)
- BPDU filter, guard, and root guard

Power
- PWR (Primary) terminal input (2-pin): 24 – 57V DC
- Power adapter input (4-pin DIN): 24 – 57V DC Note: Power inputs are not redundant, only one power source can be used for operation.
- Compatible power supply: TI-S12048 (120W), TI-S15052 (150W), TI-S24052 (240W) sold separately
- Compatible power adapter: 48VDC3000 (sold separately)
- Max. Consumption: 14W (no PoE load), 134W (full PoE load)

Management
- HTTP web-based GUI
- CLI: Telnet / SSHv2
- SNMP v1, v2c, v3
- SNMP trap (up to 5 receivers)
- RMON groups 1/2/3/9
- Modbus TCP/IP
- 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)
- Topology 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
- SFP DDMI (Digital Diagnostic Monitoring Interface)
- ERPS (Ethernet Ring Protection Switching) G8032v2

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 or configuration updates for multiple switches
- Event/hardware network monitoring (CPU/memory utilization)
- Configure features such as IP address settings VLANs, spanning tree, loopback detection, IGMP snooping, link aggregation, and bandwidth control through cloud management

Link Aggregation
- Static link aggregation and dynamic LACP (Upto 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
- Protocol 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

PoE

- PoE budget: 120W@48V DC input, 120W@24V DC input
- 802.3at: Up to 30W per port
- PoE Mode A: Pins 1, 2, 3, and 6 for power
- PoE auto classification
- PoE port priority/power scheduling/PD alive check
- Over current/short circuit protection

Terminal Block

- Power input, 2 pin
- Wire range: 0.5 mm2 to 2.5 mm2
- Solid wire (AWG): 18-20
- Stranded wire (AWG): 18-20
- Wire strip length: 10-11mm

Enclosure

- IP40 rated metal enclosure
- Fanless passive cooling
- DIN-Rail mount
- Grounding point
- ESD (Ethernet) Protection: 8kV DC
- Surge (Data) Protection: 1kV DC
- Surge (Power) Protection: 0.5kV DC

MTBF

- 754,136 hours @ 25° C

Operating Temperature

- -40° – 75° C (-40° – 167° F)

Operating Humidity

- Max. 95% non-condensing

Dimensions

- 160 x 120 x 50mm (6.3 x 4.72 x 1.97 in.)

Weight

- 844g (1.86 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-PG743Bi
- 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.

TRENDnet offers a 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.