

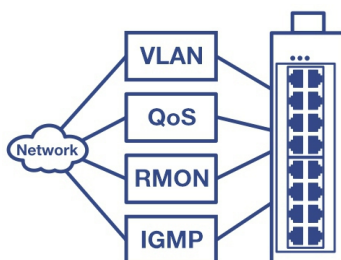
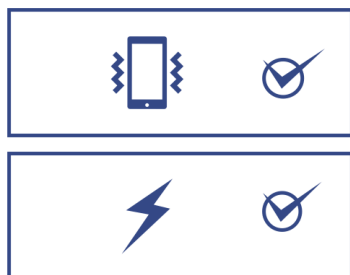
16-Port Industrial Gigabit L2 Managed DIN-Rail Switch

TI-G160i (v1.6R)

- 16 x Gigabit ports
- 32Gbps switching capacity
- Hardened IP40 rated metal housing
- Includes DIN-rail mounting bracket
- Remote cloud management with TRENDnet Hive (Additional fee applies)
- 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
- Redundant power inputs with overload current protection
- Alarm output triggered by power failure
- Power supply sold separately (models: TI-M6024, TI-S12024, TI-S12048, TI-S24048, TI-S15052, TI-S24052)
- NDAA / TAA compliant (U.S. and Canada only)
- Lifetime Warranty*

TRENDnet's 16-Port Industrial Gigabit L2 Managed DIN-Rail Switch, model TI-G160i, delivers advanced management features with a 32Gbps switching capacity. Users are able to connect sixteen devices to the switch for high speed gigabit network connections. The 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 a powerful solution for SMB networks.

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.



Shock and Vibration Resistant

The industrial layer 2 managed switches are rated for shock (EN 60068-2-27), freefall (EN 60068-2-32), and vibration (EN 60068-2-6).

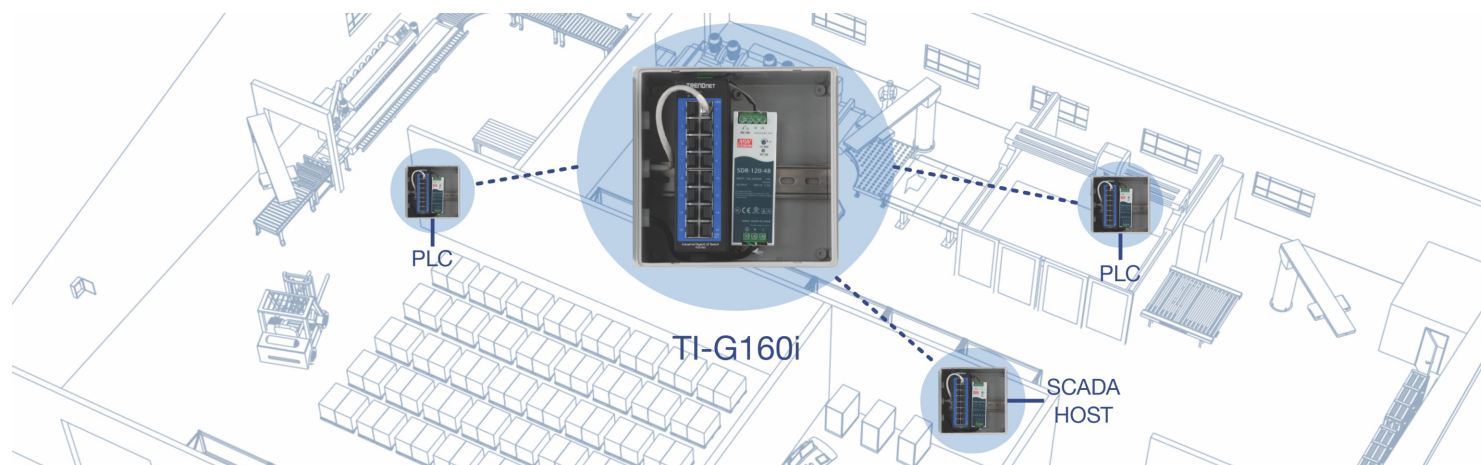
Integration Flexibility

Managed layer 2 features include VLAN, IGMP snooping, QoS, RMON, SNMP trap, and syslog for monitoring and flexible network integration.

Industrial Design

Equipped with an IP40 rated metal enclosure, the industrial layer 2 managed switch operates within a wide temperature range of -40° – 75° C (-40° – 167° F).

NETWORKING SOLUTION



FEATURES



Network Ports
16 Gigabit Ports



Monitoring
RMON, SNMP, SNMP Trap, and Port Mirroring support administrator monitoring solutions



Redundant Power
Redundant power inputs with overload current protection (power supply sold separately: TI-M6024)



Traffic Management
A broad range of network configurations are supported by: 802.3ad link aggregation, Private VLAN, 802.1Q VLAN, RTSP, Loopback Detection, 802.1p Class of Service (CoS), port bandwidth management, and QoS queue scheduling



Extreme Temperatures
Industrial switch is rated for a wide operating temperature range of -40 – 75° C (-40 – 167° F)



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



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



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)



Access Control
Features such as ACL, MAC/port filtering, 802.1X, and RADIUS are compatible with layered access controls



Switching Capacity
32Gbps switching capacity



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



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 802.3ab
- IEEE 802.3ad
- IEEE 802.3az

Device Interface

- 16 x Gigabit ports
- 6-pin removable terminal block (primary/RPS power inputs & alarm relay output)
- DIP switch (Alarm for Primary/RPS power)
- LED indicators
- Reboot button

Data Transfer Rate

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

Performance

- Switch fabric: 32Gbps
- RAM buffer: 512KB
- MAC address table: 8K entries
- Jumbo frames: 10KB
- Forwarding mode: store and forward
- Forwarding rate: 23.8Mpps (64-byte packet size)

MIB

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

Spanning Tree

- IEEE 802.1d STP (spanning tree protocol)
- IEEE 802.1w RSTP (rapid spanning tree protocol)
- BPDU filter, guard, and root guard

Link Aggregation

- Static link aggregation and 802.1ax/802.3ad dynamic LACP (Up to 8 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)

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
- Static unicast 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
- Modbus/TCP
- ERPS (Ethernet Ring Protection Switching) G8032v2

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/immediate 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

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
- Redundant power inputs
- Alarm relay triggered by power failure
- Surge and ESD protection

Power

- PWR (Primary) terminal input: 12 – 60V DC
- RPS (Redundant) terminal input: 12 – 60V DC
- Compatible power supply: TI-M6024 (60W), TI-S12024 (120W), TI-S12048 (120W), TI-S24048 (240W) sold separately
- Max. Consumption: 12W

Terminal Block

- Redundant power inputs, alarm relay contact, 6 pin
- Wire range: 0.5 mm² to 2.5 mm²
- 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

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

Alarm Relay Output

- Relay outputs 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

Enclosure

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

MTBF

- 1,072,674 hours @ 25° C
- 177,143 hours @ 75° 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

- 884 g (1.95 lbs.)

Certifications

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

Warranty

- Lifetime

Package Contents

- TI-G160i
- DIN rail mounting bracket
- Quick Installation Guide

TRENDnet offers a limited 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.

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.