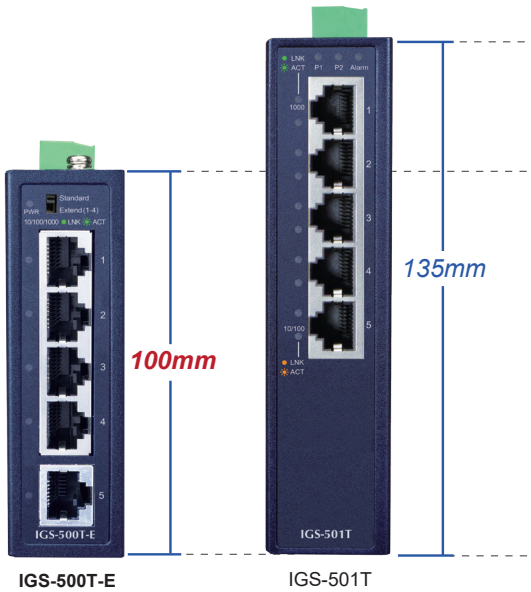
Compact Industrial 5-Port 10/100/1000T Ethernet Switch

Compact Size for More Practicability and Convenience

PLANET **IGS-500T-E Compact Industrial 5-Port 10/100/1000T Ethernet Switch**, suitable for industrial use, features 5 1000Mbps auto-negotiation ports, IP40-rated rugged yet compact case and a wide-ranging redundant power system (**12~55V DC**). The IGS-500T-E is able to operate in any harsh environment with operating temperature ranging from **-40 to 75 degrees C**.

Compact Industrial 5-Port Switch



IGS-500T-E IGS-501T

As the trend for an IIoT (Industrial Internet of Things) infrastructure continues to grow, the IGS-500T-E is designed to simplify industrial network deployment with its Plug and Play feature. Beyond offering stable and reliable fast data, it also aligns with the AIoT (Artificial Intelligence of Things) vision by enabling seamless integration of intelligent systems. This allows the collection and analysis of valuable data, empowering real-time decision-making and enhancing operational efficiency across various industrial applications.

Physical Port

- 5-port 10/100/1000BASE-T RJ45 with auto-MDI/MDI-X function

Layer 2 Features

- Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX and IEEE 802.3ab 1000BASE-T Ethernet standard
- Supports auto-negotiation and 10/100/1000Mbps half/full duplex mode
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- Complies with IEEE 802.3az Energy Efficient Ethernet (EEE)
- Supports 2K MAC address

Industrial Case and Installation

- IP40 metal case
- DIN-rail and wall-mount designs
- 12 to 55V DC, redundant power with reverse polarity protection
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 degrees C operating temperature
- Operate reliably at an altitude of 3,000 meters
- Free fall, shock-proof and vibration-proof for industries

Low Power Consumption for ESG Principles

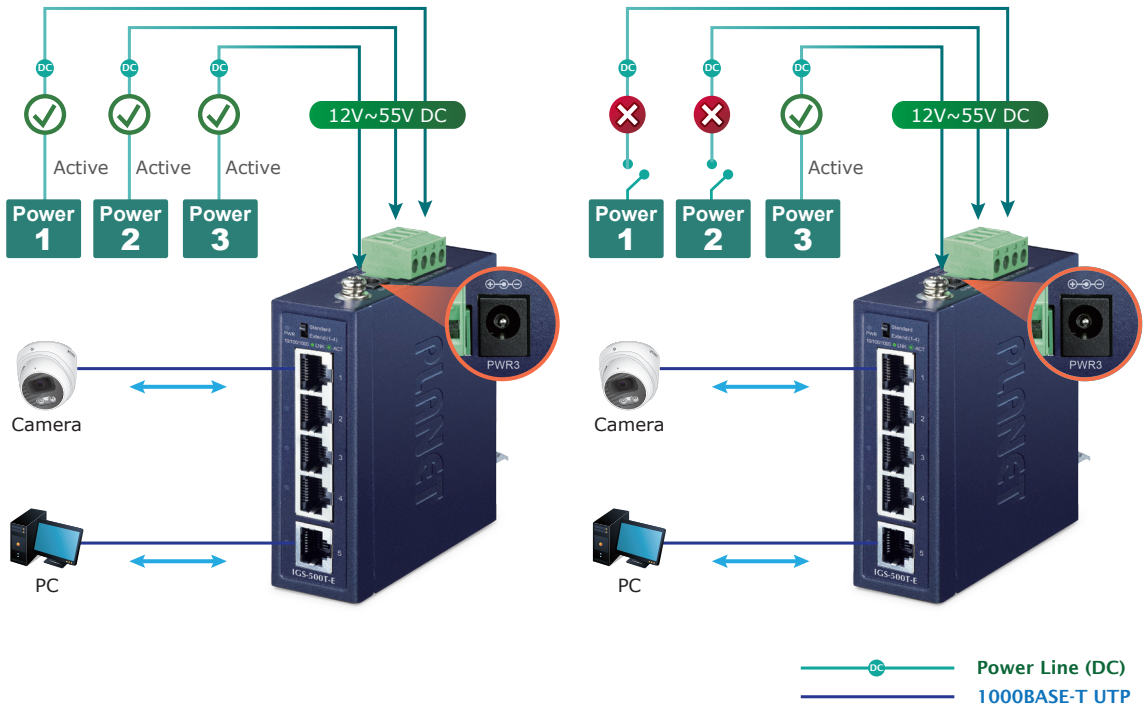
The IGS-500T-E adopts advanced green networking technology that aligns with **Environmental**, **Social**, **and Governance (ESG)** principles, offering link-on cable length power-saving and link-down power-saving features. These capabilities enable the IGS-500T-E to maintain exceptionally low power consumption even under full-load operation, effectively conserving energy while delivering outstanding performance. Compared to the IGS-500T, the IGS-500T-E can reduce energy consumption by over 50%.

With **Auto Power Savings** and the **IEEE 802.3az Energy-Efficient Ethernet (EEE)** protocol, the IGS-500T-E can automatically detect cable link status and network traffic, adjusting its power consumption accordingly. When device activity is lower, the switch consumes less power, achieving greater energy efficiency.

Triple Power Input for High Availability Network System

The IGS-500T-E features a robust triple power input system with wide-ranging voltages (12V~55V DC) incorporated into the customer's automation network to enhance system reliability and uptime. In the example below, if one power supply fails, the hardware failover function will be activated automatically to keep powering the IGS-500T-E via the remaining power supplies alternatively, ensuring continuous operation without any interruptions.

Non-stop Ethernet Server
Triple Power Input with Auto Failover



High Switch Performance

The IGS-500T-E comes with high-performance switch architecture, making it suitable for industrial networking. With the **5** 10/100/1000Mbps Ethernet ports providing non-blocking switch fabric and wire-speed throughput as high as 10Gbps and the 2K MAC address table, the IGS-500T-E can perform wire-speed packet transfer without the risk of packet loss. The flow control function enables the IGS-500T-E to provide fast and reliable data transfer.

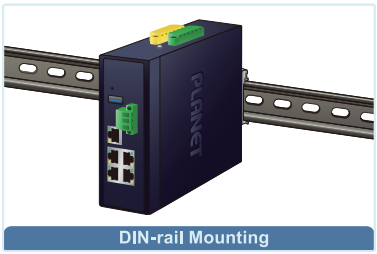
Plug and Play

All of the RJ45 copper interfaces in the IGS-500T-E support 10/100/1000Mbps auto negotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cables. The standard auto-MDI/MDI-X support can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

Flexible and Easy Installation with Limited Space

The compact sized IGS-500T-E is specially designed to be installed in a narrow environment, such as wall enclosure. It can be installed by fixed wall mounting or DIN rail, thereby making its usability more flexible and easier in any space-limited location.

Optional installation method



DIN-rail Mounting

Wall Mounting

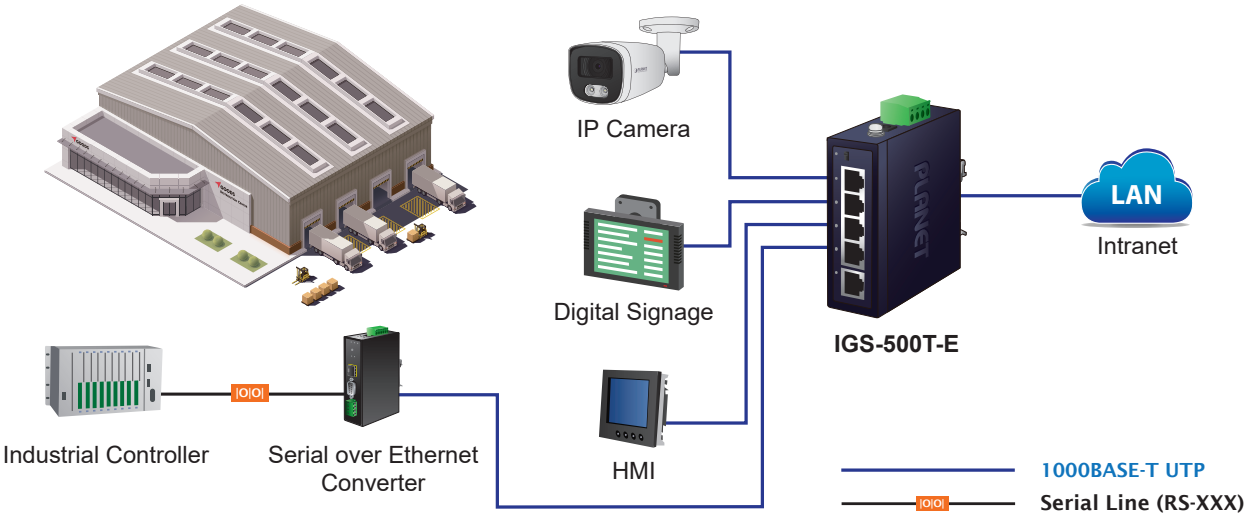
Side Wall Mounting (Space saving)

* The above pictures are for illustration only.

Applications

Designed for Heavy Industries

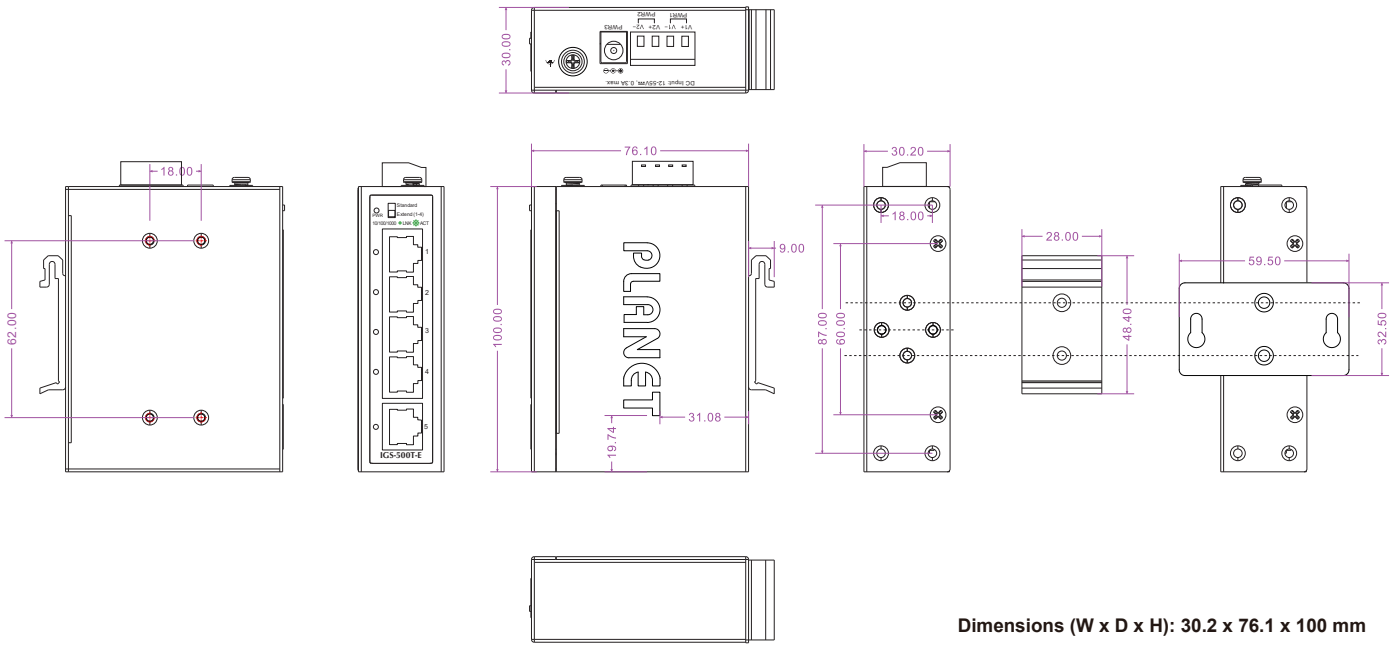
The IGS-500T-E's IP40-rated metal case is particularly designed for heavy industries, such as factories, harbors, warehouses, and more. When installed at these establishments, it can enhance the work performance of these establishments by speedily transferring incoming and outgoing data.



Product Specifications

Model	IGS-500T-E
Hardware Specifications	
Copper Ports	**5** x 10/100/1000BASE-T RJ45 TP auto-MDI/MDI-X, auto negotiation
Connector	Removable 4-pin terminal block Pin 1/2 for Power 1; Pin 3/4 for Power 2 DC Jack Connector
DIP Switch	**Standard Mode:** In Standard Mode, all interfaces can communicate with each other, supporting a transmission distance of up to 100 meters with an adaptive transmission rate of 10/100/1000Mbps. **Extend Mode:** In Link Extension Mode, data transmission on ports 1 to 4 can reach up to 250 meters, with a reduced transmission speed of 10Mbps to ensure signal stability over long distances.
LED	1 x LED for system and power: ■ **Green**: DC Power 1 1 x LED for each copper port : ■ **Green**: 10/100Mbps LNK/ACT
Power Requirements	12~55V DC redundant power with revise polarity protection
Power Consumption / Dissipation	Max. 0.55 watts/1.88 BTU (Power on without any connection) Max. 1.65 watts/5.63 BTU (Ethernet full loading)
Dimensions (W x D x H)	30.2 x 76.1 x 100 mm
Weight	266g
Enclosure	IP40 metal case
Installation	DIN-rail kit and wall-mount ear
ESD Protection	6KV
EFT Protection	6KV
Network Cables	10/100/1000BASE-T Cat. 3, 4, 5, 5e, 6 UTP cable (max. 100 meters) EIA/TIA-568 100-ohm STP (max. 100 meters)
Switch Specifications	
Switch Processing Scheme	Store-and-Forward
Switch Fabric	10Gbps
Throughput (packet per second)	0.744Mpps@64bytes
Address Table	2K entries
Shared Data Buffer	3M bits
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
Standards Conformance	
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3x Full-Duplex Flow Control IEEE 802.3az Energy Efficient Ethernet
Regulatory Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC 60068-2-32 (free fall) IEC 60068-2-27 (shock) IEC 60068-2-6 (vibration)
Environment	
Temperature	Operating: -40~75 degrees C Storage: -40~85 degrees C
Humidity	Operating: 10~90%, Storage: 5~95% (non-condensing)

Dimensions



Dimensions (W x D x H): 30.2 x 76.1 x 100 mm

Ordering Information

IGS-500T-E	Compact Industrial 5-Port 10/100/1000T Ethernet Switch (-40~75 degrees C)

Related Product

ISW-500T	Compact Industrial 5-port 10/100TX Ethernet Switch (-40~75 degrees C operating temperature)
ISW-500T-E	Compact Industrial 5-Port 10/100TX Ethernet Switch (-40~75 degrees C)
ISW-800T	Compact Industrial 8-Port 10/100TX Ethernet Switch (-40~75 degrees C operating temperature)
IGS-500T	Compact Industrial 5-port 10/100/1000T Gigabit Ethernet Switch (-40~75 degrees C operating temperature)
IGS-800T	Compact Industrial 8-port 10/100/1000T Gigabit Ethernet Switch (-40~75 degrees C operating temperature)
IGS-501T	5-Port 10/100/1000T Industrial Gigabit Ethernet Switch (-40~75 degrees C operating temperature)
IGS-801T	8-port 10/100/1000T Industrial Gigabit Ethernet Switch (-40~75 degrees C operating temperature)

PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)

Tel: 886-2-2219-9518 Fax: 886-2-2219-9528

Email: sales@planet.com.tw www.planet.com.tw