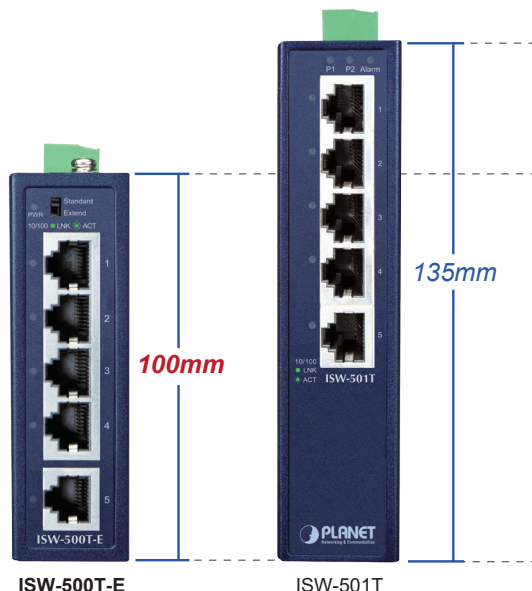# Compact Industrial 5-Port 10/100TX Ethernet Switch

Compact Size for More Practicability and Convenience

PLANET **ISW-500T-E Compact Industrial 5-Port 10/100TX Ethernet Switch**, suitable for industrial use, features 5 100Mbps auto-negotiation ports, IP40-rated rugged yet compact case and a wide-ranging redundant power system (**12~55V DC**). The ISW-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

ISW-500T-E   ISW-501T

As the trend for an IIoT (Industrial Internet of Things) infrastructure continues to grow, the ISW-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 10/100BASE-TX RJ45 with auto-MDI/MDI-X function
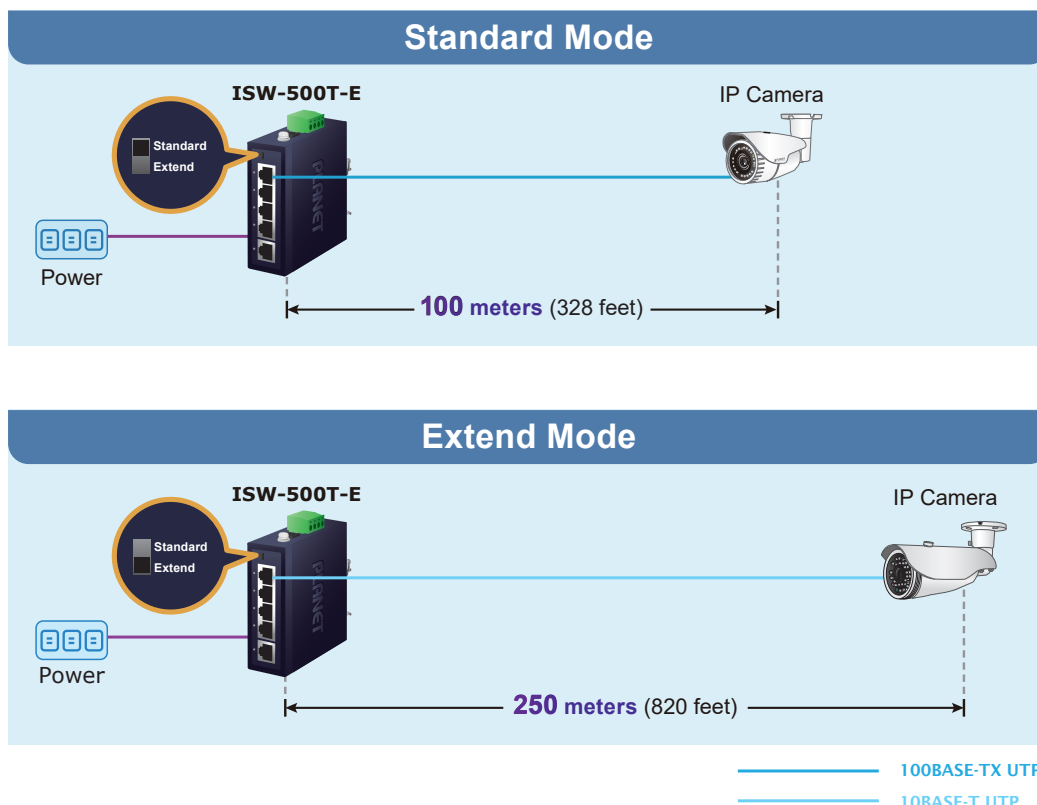
Layer 2 Features

- Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX Ethernet standard
- Supports auto-negotiation and 10/100Mbps 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 1K 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

Distance Extended for Transmission of Data

The built-in solid DIP switch provides "Standard" and "Extend" operation modes. The ISW-500T-E operates as a regular Ethernet switch in the "Standard" mode. In the "Extend" operation mode, the ISW-500T-E operates on a per-port basis in 10Mbps duplex mode, supporting data transmission over a distance of up to 250 meters, overcoming the typical 100-meter limitation of Ethernet UTP cable. This feature offers a cost-effective solution for extending Ethernet transmission distance without additional equipment.

Standard Mode

ISW-500T-E   IP Camera

Standard
Extend

Power

100 meters (328 feet)

Extend Mode

ISW-500T-E   IP Camera

Standard
Extend

Power

250 meters (820 feet)

100BASE-TX UTP
10BASE-T UTP

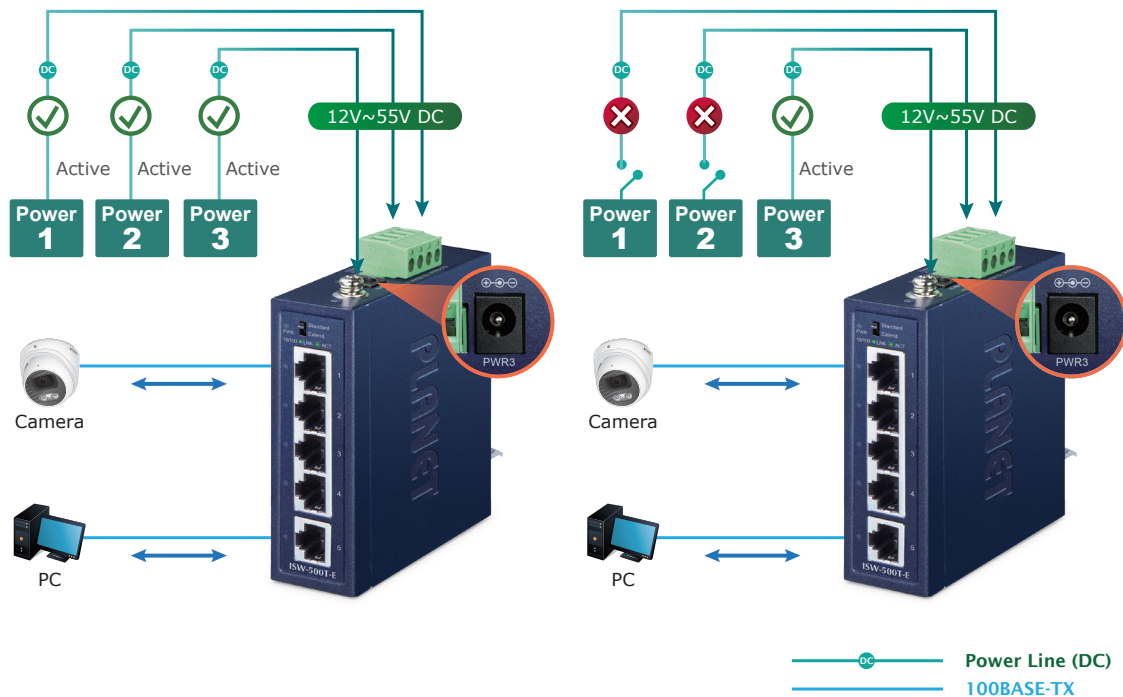### Low Power Consumption for ESG Principles

The ISW-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 ISW-500T-E to maintain exceptionally low power consumption even under full-load operation, effectively conserving energy while delivering outstanding performance. Compared to the ISW-500T, the ISW-500T-E can reduce energy consumption by over 50%.

With **Auto Power Savings** and the **IEEE 802.3az Energy-Efficient Ethernet (EEE)** protocol, the ISW-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 ISW-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 ISW-500T-E via the remaining power supplies alternatively, ensuring continuous operation without any interruptions.

Non-stop Ethernet Server
Triple Power Input with Auto Failover

12V~55V DC

Active Active Active

Power 1 Power 2 Power 3

PWR3

Camera

PC

12V~55V DC

Active

Power 1 Power 2 Power 3

PWR3

Camera

PC

Power Line (DC)
100BASE-TX

High Switch Performance

The ISW-500T-E offers high-performance switch architecture. With the **5** 10/100Mbps Ethernet ports providing non-blocking switch fabric and wire-speed throughput as high as 1Gbps and the 1K MAC address table, the ISW-500T-E can perform wire-speed packet transfer without the risk of packet loss. The flow control function enables the ISW-500T-E to provide fast and reliable data transfer.

Plug and Play

All of the RJ45 copper interfaces in the ISW-500T-E support 10/100Mbps 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 ISW-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

* The above pictures are for illustration only.