

## Industrial 16-Port 10/100TX Fast Ethernet Switch(-40~75 degrees C)



PLANET ISW-1600T **Industrial** high-density **16-port 10/100TX Fast Ethernet Switch** is equipped with a rugged IP30 metal case for stable operation in heavy industrial demanding environments. Thus, the ISW-1600T provides a high level of immunity against electromagnetic interference and heavy electrical surges which are usually found on plant floors or in curbside traffic control cabinets.



### Environmentally Hardened Design

The ISW-1600T possesses an integrated power supply source with a wide range of voltages (**12 to 48V DC** or **24V AC**) for worldwide high availability applications requiring dual or backup power inputs. Being able to operate under wide temperature range from **-40 to 75 degrees C**, the ISW-1600T can be placed in almost any difficult environment. The ISW-1600T also allows either DIN rail or wall mounting for efficient use of cabinet space.



### Physical Port

- 16-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)
- IEEE 802.1p CoS
- Supports 16K MAC address
- Automatic address learning and address aging

### Industrial Case and Installation

- IP30 metal case
- DIN-rail and wall-mount designs
- 12 to 48V DC, redundant power with reverse polarity protection
- 24V AC power input
- Supports 6000 VDC Ethernet ESD protection
- -40 to 75 degrees C operating temperature
- Free fall, shock-proof and vibration-proof for industries

**Robust Protection**

The ISW-1600T provides a contact discharge of  $\pm 6\text{KV}$  DC and air discharge of  $\pm 6\text{KV}$  DC for Ethernet ESD protection. It also supports  $\pm 6\text{KV}$  surge immunity to improve product stability and protects users' networks from devastating ESD attacks, making sure the flow of operation does not fluctuate.

**Energy Saving**

The ISW-1600T, integrated with advanced green networking technologies and IEEE 802.3az protocol based power saving, is able to provide power savings of up to 50% but maintain high performance efficiently.

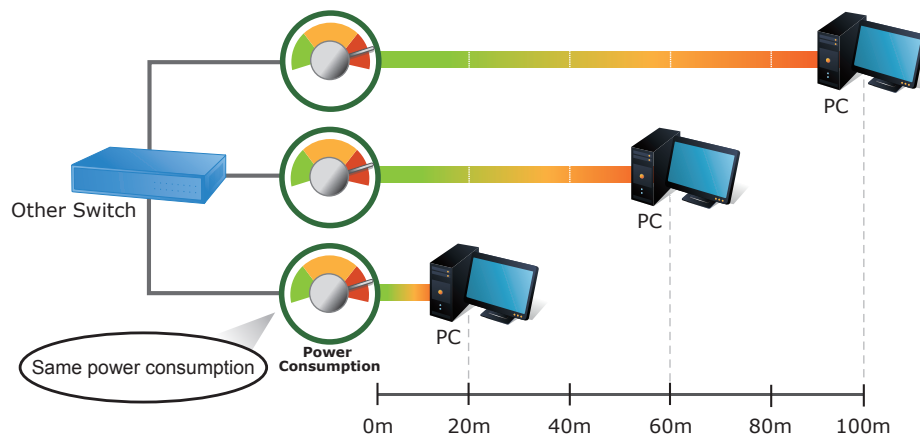
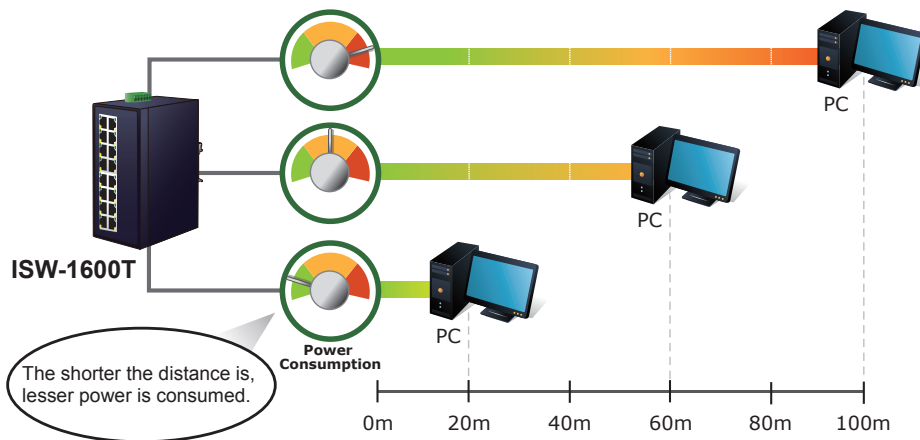
■ Link Down power saving

The Link Down power saving goes beyond IEEE specifications to automatically lower power consumption for a given port when it is not linked. With the Link Down power saving technology, the ISW-1600T will automatically adjust power usage of the ports that are shut down or not connected to network device.

■ Intelligent power scale based on cable length

Intelligent power scale is an intelligent algorithm that actively determines the appropriate power level based on cable length. When the ISW-1600T is connected with Ethernet cable shorter than 20m, a device can obtain maximum power saving because the ISW-1600T would automatically detect the Ethernet cable length and diminish power usage. The connected device can substantially reduce the overall power consumption, which makes a significant contribution to energy saving

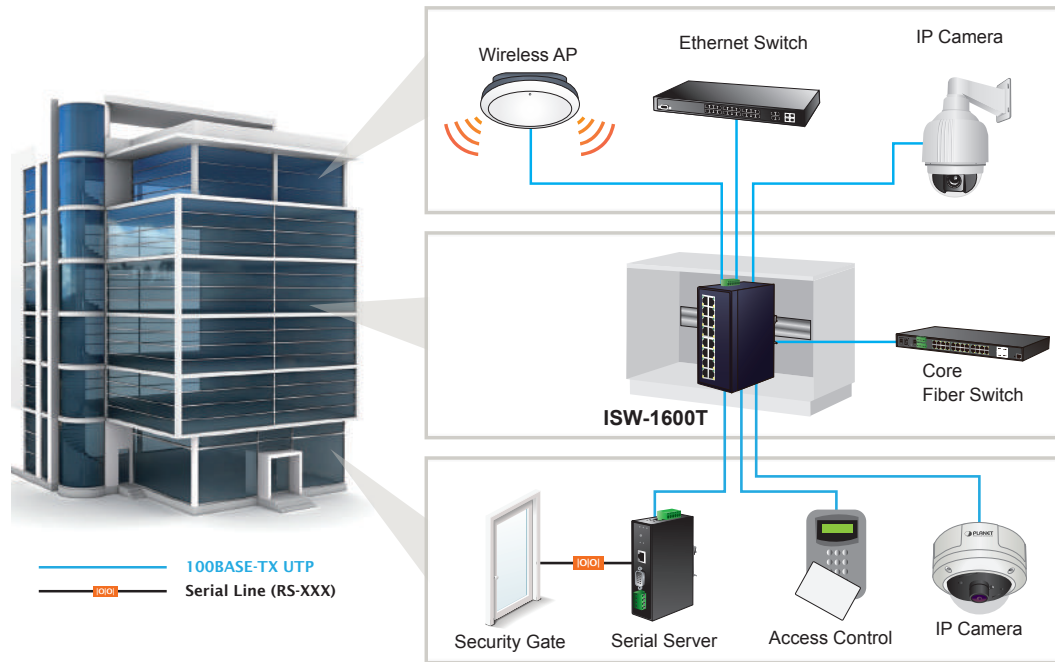
### Intelligent Power Savings



## Applications

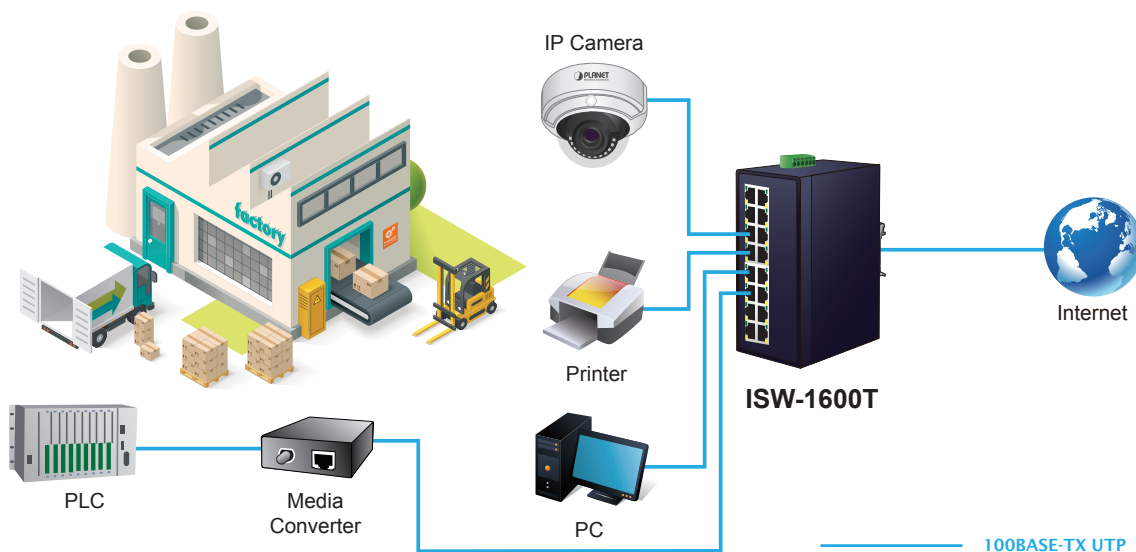
### Industrial-grade Switch for Building Automation and Security

Suitable for buildings where security is strictly enforced, the ISW-1600T, with sixteen Fast Ethernet interfaces, can easily build an IP phone system, IP surveillance system, and wireless AP group in the harsh Industrial environment.



### Designed for Heavy Industries

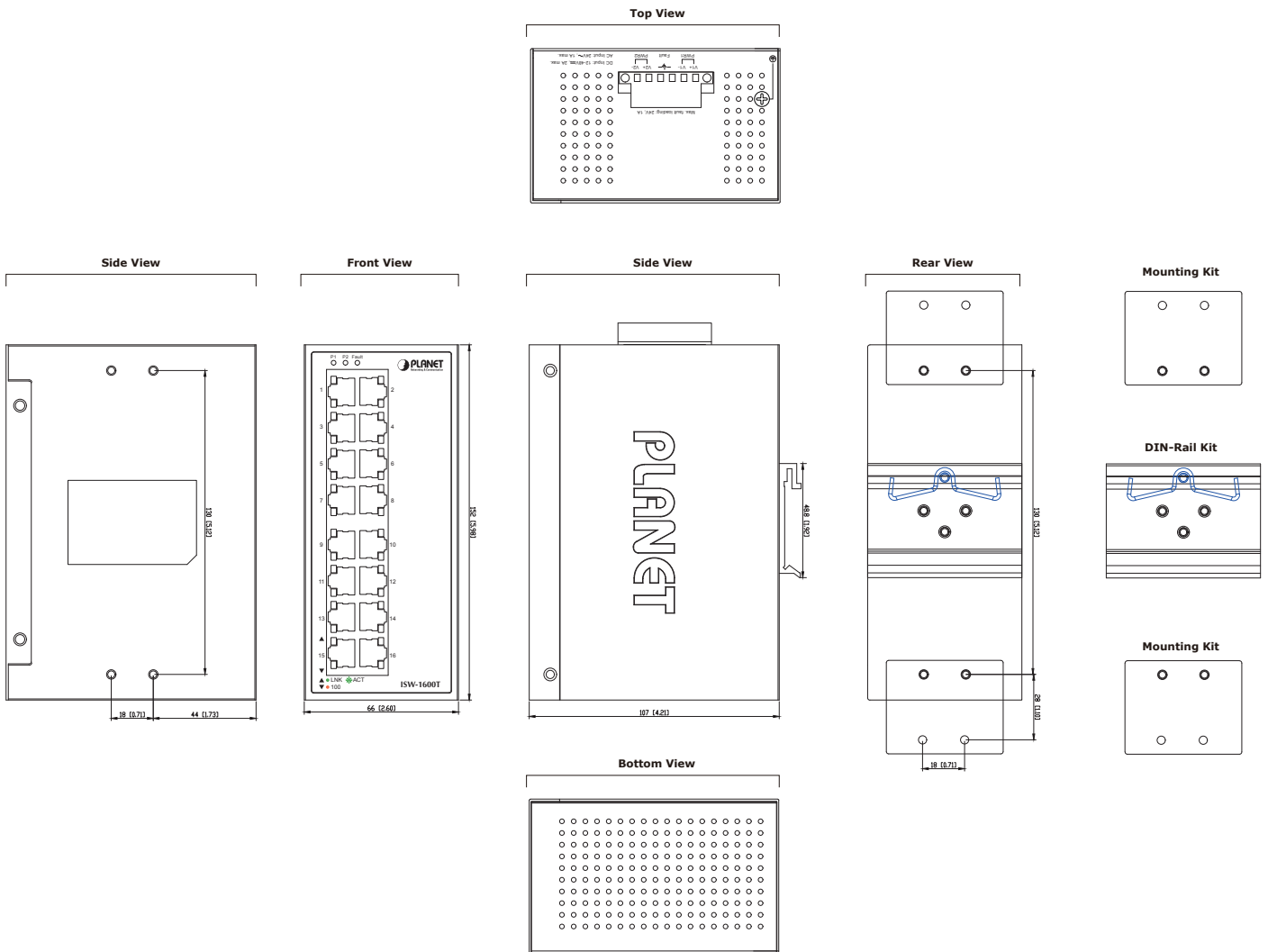
The ISW-1600T's IP30-rated metal case is particularly designed for heavy industries, such as factories, harbors, warehouses, and more. When installed at these establishments, it can enhance the work performance of these establishments by speedily transferring incoming and outgoing data.



## Specifications

Product	ISW-1600T
<b>Hardware Specifications</b>	
Fast Ethernet Copper Ports	16 10/100BASE-TX RJ45 auto-MDI/MDI-X ports
Switch Architecture	Store-and-Forward
Switch Fabric	3.2Gbps (non-blocking)
Throughput (packet per second)	2.38Mpps@ 64 bytes
Address Table	16K entries, automatic source address learning and aging
Shared Data Buffer	4Mbits
Flow Control	IEEE 802.3x pause frame for full-duplex Back pressure for half-duplex
ESD Protection	6KV DC
Enclosure	IP30 metal case
Installation	DIN-rail kit and wall-mount kit
Connector	Removable 6-pin terminal block for power input Pin 1/2 for Power 1, Pin 3/4 for fault alarm, Pin 5/6 for Power 2
Alarm	One relay output for power failure. Alarm relay current carry ability: 1A @ 24V DC
Dimensions (W x D x H)	66 x 107 x 152 mm
Weight	255g
Power Requirements	Dual 12~48V DC, 24V AC
Power Consumption	Max. 5.3 watts/18BTU (Ethernet full loading)
<b>Standards Conformance</b>	
Regulatory Compliance	FCC Part 15 Class A, CE
Stability Testing	IEC60068-2-32 (free fall) IEC60068-2-27 (shock) IEC60068-2-6 (vibration)
Standards Compliance	IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x flow control and back pressure IEEE 802.1p Class of Service IEEE 802.3az Energy Efficient Ethernet (EEE)
<b>Environment</b>	
Operating Temperature	-40 ~ 75 degrees C
Storage Temperature	-40 ~ 85 degrees C
Humidity	5 ~ 95% (non-condensing)

## Dimensions



Unit: mm

## Ordering Information

ISW-1600T Industrial 16-Port 10/100TX Fast Ethernet Switch (-40~75 degrees C)

## Related Industrial PoE Switches

IFGS-1822TF Industrial 16-Port 10/100TX + 2-Port Gigabit TP/SFP Combo Ethernet Switch (-40~75 degrees C)

IGS-20040MT Industrial L2+ 16-Port 10/100/1000T + 4-Port 100/1000X SFP Managed Switch (-40~75 degrees C)

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ISW-1600T