

# 4-Port 10/100Base-TX + 2-Port 100Base-FX SFP Industrial Ethernet Switch with Wide Operating Temperature



## *Highly Convenient and Distance Extendable Industrial Robust Switch*

PLANET ISW-621TF is a new Industrial Ethernet Switch that can operate under **WIDE-TEMPERATURE** environment ranging from -40 up to 75 Degrees C and equip two SFP 100Base-FX slots. With **two mini-GBIC 100Base-FX SFP** (Small-Form Factor Pluggable) interfaces support, the deployed distance of the ISW-621TF can be extended from 550 meters (via Multi-mode fiber) up to above 60 kilometers (via Single-mode fiber), respectively. In other words, the ISW-621TF provides more flexibility for Transportation, Manufactory, Security and Surveillance with distance extension without any limitation and is a suitable model either for long or short distance network deployment.

## *Harden Design*

The ISW-621TF can operate stably in harsh environment with wide operating temperature support. It also provides a high level of immunity against electromagnetic interference and heavy electrical surges which are usually found on plant floors or in curb side traffic control cabinets.

## *Easy Installation and Wide Range of Power Usage*

The ISW-621TF is designed with a compact case that allows either DIN rail or panel mounting for efficient usage of cabinet space. It provides an integrated power supply with a wide range of voltages for worldwide operation. It also offers dual-redundant, reversible polarity 12V DC to 48V DC power supply inputs for high availability applications requiring dual or backup power inputs.

## KEY FEATURES

### *PHYSICAL PORT*

- 4-Port 10/100Base-TX RJ-45 with auto MDI/MDI-X function
- 2-Port 100Base-FX SFP interface

### *LAYER 2 FEATURES*

- Complies with IEEE 802.3, IEEE 802.3u 10/100Base-TX, 100Base-FX Ethernet standard
- Supports Auto-Negotiation and 10/100Mbps half / full duplex mode for each copper port
- High performance Store and Forward architecture, broadcast storm control, runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Prevents packet loss with back pressure (Half-Duplex) and IEEE 802.3x PAUSE frame flow control (Full-Duplex)
- Backplane (Switching Fabric): 1.2Gbps
- Integrated address look-up engine, supports 2K absolute MAC addresses
- 1Mbit on-chip frame buffer
- Automatic address learning and address aging
- CSMA/CD Protocol

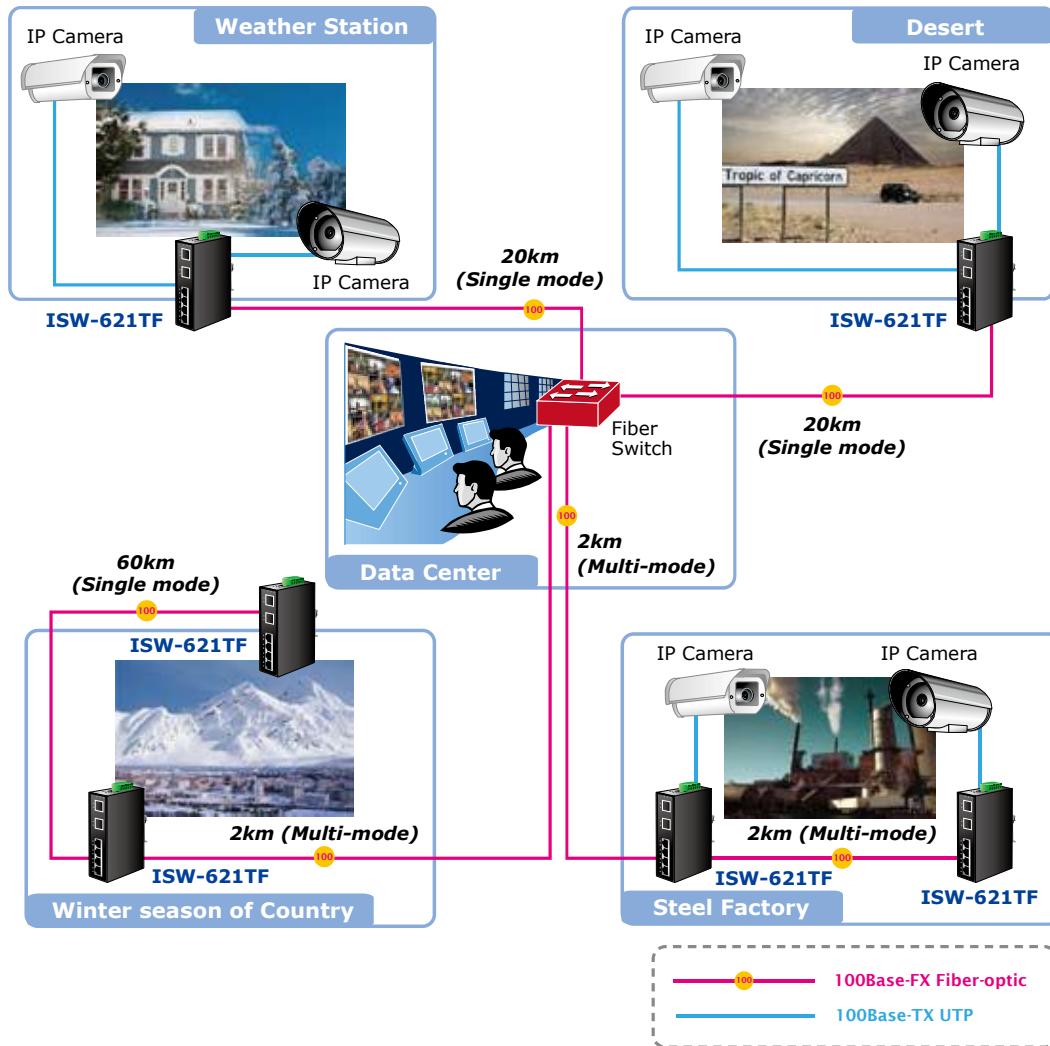
### *INDUSTRIAL CASE / INSTALLATION*

- IP-30 metal case protection
- DIN Rail and Wall Mount Design
- 12 to 48V DC, redundant power with polarity reverse protection and connective removable terminal block for master and slave power
- Supports EFT protection 6KV DC for power line
- Supports 6KV DC Ethernet ESD protection
- -40 to 75 Degree C wide operating temperature

## APPLICATIONS

### **Industrial Switch for High Performance Data Collect and Forward**

The ISW-621TF equips with four 10/100Mbps ports offering auto MDI / MDIX feature, and two 100Base-FX SFP slots providing 1.2Gbps non-blocking switch fabric and the 2K MAC Address table so that they can perform wire-speed packets transfer without risk of packet loss. The ISW-621TF with the slim type IP 30 metal shape is ideal for most Heavy Industrial demanding environments.



## SPECIFICATION

Model		ISW-621TF
<b>Hardware Specification</b>		
Copper	Ports	4 x 10/100Base-TX, Auto-Negotiation, Auto-MDI/MDI-X
	Cable	10Base-T : 2-pair UTP Cat. 3, 4, 5 cable (100meters, max.) 100Base-TX : 2-pair UTP Cat. 5, 5e, 6 cable (100meters, max.)
Optical	Port / Type	2 x 100Base-FX / LC Interfaces
	Cable Mode	Multi-mode: 50/125µm / 62.5/125µm fiber Single-mode: 9/125µm fiber
Dimension (W x D x H)		135 x 97 x 32 mm
Weight		442g
Power Requirement		12~48V DC, Redundant power with polarity reverse protection
Power Consumption / Dissipation		Max. 16 Watts / 54 BTU
Installation		DIN Rail Kit / Wall Mount Ear
Alarm		Provides one relay output for power fail Alarm Relay current carry ability: 1A @ DC 24V
<b>Switch Specification</b>		
Switch Processing Scheme		Store-and-Forward
Address Table		2K entries
Buffer		1Mbit
Flow Control		Back pressure for half duplex IEEE 802.3x Pause Frame for full duplex
Switch Fabric		1.2Gbps
Throughput (Packet Per Second)		0.89Mpps @ 64Bytes
<b>Standards Conformance</b>		
Standards Compliance		IEEE 802.3 Ethernet, 10Base-T IEEE 802.3u Fast Ethernet, 100Base-TX, 100Base-FX IEEE 802.3x Full-Duplex Flow Control
Regulation Compliance		FCC Part 15 Class A, CE
Stability Testing		IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
<b>Environment</b>		
Temperature		Operating: -40~75 Degree C Storage: -40~85 Degree C
Humidity		Operating: 5~90% Storage: 5~90% (Non-condensing)

## ORDERING INFORMATION

<b>ISW-621TF</b>	4-Port 10/100Base-TX + 2-Port 100Base-FX SFP Industrial Ethernet Switch (-40 ~ 75 Degree C operate temperature)
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## RELATED PRODUCTS

<b>MFB-FX</b>	SFP-Port 100Base-FX Transceiver (1310nm) -2km
<b>MFB-F20</b>	SFP-Port 100Base-FX Transceiver (1310nm) - 20km
<b>MFB-F40</b>	SFP-Port 100Base-FX Transceiver (1310nm) - 40KM
<b>MFB-F60</b>	SFP-Port 100Base-FX Transceiver (1310nm) - 60KM
<b>MFB-FA20</b>	SFP-Port 100Base-BX Transceiver (WDM,TX:1310nm) -20km
<b>MFB-FB20</b>	SFP-Port 100Base-BX Transceiver (WDM,TX:1550nm) -20km
<b>MFB-TFX</b>	SFP-Port 100Base-FX Transceiver (1310nm) -2km (-40~75°C)
<b>MFB-TF20</b>	SFP-Port 100Base-FX Transceiver (1310nm) - 20km (-40~75°C)
<b>ISW-621</b>	4+2 100FX Port Multi-mode Industrial Ethernet Switch - 2km (-10~60 Degree C operate temperature)
<b>ISW-621S15</b>	4+2 100FX Port Single-mode Industrial Ethernet Switch - 15km (-10~60 Degree C operate temperature)
<b>ISW-621T</b>	4+2 100FX Port Multi-mode Industrial Ethernet Switch - 2km (-40~75 Degree C operate temperature)
<b>ISW-621TS15</b>	4+2 100FX Port Single-mode Industrial Ethernet Switch - 15km (-40~75 Degree C operate temperature)

## Data Sheet

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