

4-Port 10/100Base-TX + 2-Port 100Base-FX Industrial Fast Ethernet Switch



New slim type with more practicability and convenience

PLANET releases the advanced industrial hardened Ethernet Switch with new slim type, IP-30 metal case: ISW-621 / ISW-621S15. Each of them equips with 4 10/100Base-TX Auto-negotiation ports. The ISW-621 has 2 100Base-FX multi-mode SC interfaces for transmission distance up to 2km, and the ISW-621S15 has 2 100Base-FX single-mode SC interfaces for transmission distance up to 15km, both of them operate reliably in Heavy Industrial demanding environments. Meanwhile, the compact, IP-30 standard metal case allows either DIN rail or wall mounting for efficient use of cabinet space.

Stable operate performance under difficult environments

The ISW-621 / ISW-621S15 provide 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. Being able to operate under the temperature range from -10 to 60 Degree C coupled with hazardous location certification (Class 1 Division 2), the ISW-621 / ISW-621S15 can be placed in almost any difficult environment. The ISW-621 / ISW-621S15 also possess an integrated power supply source with wide range of voltages (12 to 48V DC) for worldwide high availability applications requiring dual or backup power inputs.

Robust Switch performance

The ISW-621 / ISW-621S15 each provides 4 10/100Base-TX Ethernet ports and 2 100Base-FX optic-fiber SC interfaces, and boasts a high performance switch architecture that is capable of providing non-blocking switch fabric and wire-speed throughput as high as 1.2Gbps. With 2K MAC Address table, they offer wire-speed packets transfer performance without risk of packet loss. The Flow Control function allows the ISW-621 / ISW-621S15 for fast and reliable data transfer.

All of the RJ-45 copper interfaces in the ISW-621 / ISW-621S15 support 10/100Mbps Auto-Negotiation for optimal speed detection through RJ-45 Category 3, 4 or 5 cables. The standard Auto-MDI/MDI-X support can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.

KEY FEATURES

PHYSICAL PORT

- 4-Port 10/100Base-TX RJ-45 with auto MDI/MDI-X function
- 2-Port 100Base-FX interfaces for up to 2km (Multi-mode fiber 50/125µm) on ISW-621
- 2-Port 100Base-FX interfaces for up to 15km (Single-mode fiber 9/125µm) on ISW-621S15

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, support 2K absolute MAC addresses
- 1 Mbit on-chip frame buffer
- Automatic address learning and address aging
- CSMA/CD Protocol

INDUSTRIAL CASE / INSTALLATION

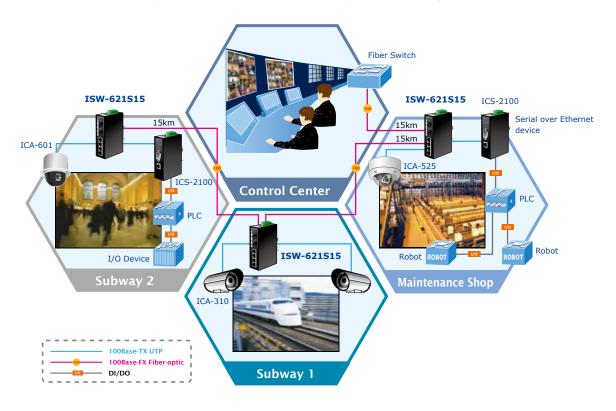
- IP-30 Metal case / Protection
- DIN Rail and Wall Mount Design
- 12 to 48V DC, redundant power with polarity reverse protect function and connective removable terminal block for master and slave power
- Supports EFT protection 6000 VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- -10 to 60 Degree C operation temperature



APPLICATIONS

Industrial area Switch for data collect and forward

The ISW-621 / ISW-621S15 equip with 4 10/100Mbps ports that offers auto MDI / MDIX feature, 2 100Base-FX optic-fiber SC interfaces, 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-621 / ISW-621S15 with the slim type IP 30 metal shape is ideal for most Heavy Industrial demanding environments.





SPECIFICATION

Product		4-Port 10/100Base-TX + 2-Port 100Base-FX Industrial Fast Ethernet Switch		
Model		ISW-621	ISW-621S15	
Hardware Specificat	ion			
	Ports	4 x 10/100Base-TX, Auto-negotiation, Auto-MDI/MDI-X		
Copper	Cable	10Base-T : 2-pair UTP Cat. 3, 4, 5 cable (100meter 100Base-TX : 2-pair UTP Cat. 5 cable (100meters,		
	Port	2 x 100Base-FX		
	Cable	50/125 μm fiber	9/125 μm fiber	
	Mode	Multi-mode	Single-mode	
	Distance	2km	15km	
Optical	Frequency	1300nm	1310nm	
	Launch Power	Max14dBm, Min19dBm	Max7dBm, Min20dBm	
	Receive Sensitivity	-34.5dBm	-28dBm	
	Max. Input Power	-14dBm	-8dBm	
Dimension (W x D x H)		135 x 97 x 32 mm	Cub	
Weight	11)	442g		
Weight		12~48V DC,		
Power Requirement		Redundant power with polarity reverse protection function		
Power Consumption / Dissipation		11.6 Watts / 40BTU		
Power Consumption / Dissipation Installation		DIN rail kit / wall mount ear		
installation		Provides one relay output for power fail		
Alarm		Alarm Relay current carry ability: 1A @ DC 24V		
Switch Specification	1	Additional Current Carry ability. 17 @ DC 24V		
Switch Processing Scheme		Store-and-Forward		
Address Table		2K entries		
Buffer		1Mbit		
Burier		Back pressure for half duplex		
Flow Control Switch Fabric		IEEE 802.3x Pause Frame for full duplex		
		1.2Gbps		
Throughput (Packet	· Por Cocond)	0.89Mpps @ 64Bytes		
Standards Conforma		0.65Mpps @ 04bytes		
Standards Comornia	ance	IEEE 802.3 Ethernet, 10Base-T		
Standards Compliar	200	·		
Staridards Compilar	ice	IEEE 802.3u Fast Ethernet, 100Base-TX, 100Base-FX		
		IEEE 802.3x Full-duplex flow control		
Temperature		Operating: -10~60 Degree C		
Humidity Operating		Storage: -40~85 Degree C		
		Operating: 5~90%,		
		Storage: 5~90% (Non-condensing)		
Regulation Compliance		FCC Part 15 Class A, CE		
Stability Testing		IEC60068-2-32(Free fall)		
		IEC60068-2-27(Shock)		
		IEC60068-2-6(Vibration)		

ORDERING INFORMATION

ISW-621	4+2 100FX Port Multi-mode Industrial Ethernet Switch - 2km (-10~60 Degree C operate temperature)
ISW-621S15	4+2 100FX Port Single-mode Industrial Ethernet Switch - 15km (-10~60 Degree C operate temperature)

RELATED PRODUCTS

ISW-511	4+1 100FX Port Multi-mode Industrial Ethernet Switch - 2km (-10~60 Degree C operate temperature)
ISW-511S15	4+1 100FX Port Single-mode Industrial Ethernet Switch - 15km (-10~60 Degree C operate temperature)
ISW-511 T	4+1 100FX Port Multi-mode Industrial Ethernet Switch - 2km (-40~75 Degree C operate temperature)
ISW-511 TS15	4+1 100FX Port Single-mode Industrial Ethernet Switch - 15km (-40~75 Degree C operate temperature)
ISW-621 T	4+2 100FX Port Multi-mode Industrial Ethernet Switch - 2km (-40~75 Degree C operate temperature)
ISW-621 TS15	4+2 100FX Port Single-mode Industrial Ethernet Switch - 15km (-40~75 Degree C operate temperature)

2015-07

