

Installation Instructions for
4 Port 10/100Base-TX Ethernet Switch
with 1 Port 100Base-FX Uplink
Optical Fiber Switch

Description

The FSW2104 is an unmanaged 4 port 10/100 switch with one 100Base-FX Fiber uplink. They are designed for small workgroup applications that require a long distance connection to the backbone, such as between buildings, offices, or within a campus location. These switches provide port speeds up to 200 Mbps and full-duplex capability on each auto-sensing port, for enhanced performance. A wide range of transceiver selection provides fiber connection with SC, FC or ST type connectors, in multimode or single mode and at distances from 2 to 120KM.



Fiber
Connection Indications

LED

Ethernet Connections

Interface	Indicator	Status Description
FX	Fiber	TX : transmit data RX : receive data
LED Indicator		Status Description
PWR		ON : Power ON OFF : Power OFF
FL		ON : Connection is made OFF: No connection is made Blinking : Transmitting or Receiving
TL1, TL2, TL3 & TL4		ON : Connection is made OFF : No connection is made Blinking : Transmitting or Receiving



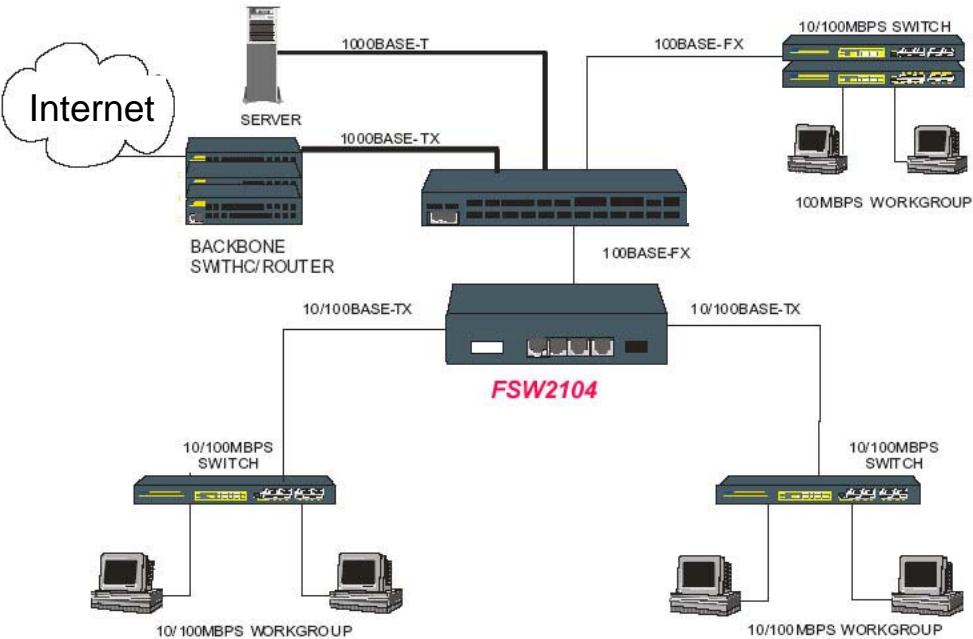
Power Switch

AC Jack

Specifications

Fiber Connector Type	SC, FC or ST type
Fiber Wavelength	1310nm (typical), 1550nm (optional)
Transmission distance	0 ~ 120km (optional), depends on the transceiver model
Ethernet port	10/100Base-Tx (Auto-negotiation) supports VLAN Tag (max. length 1536 bytes) 64K MAC address table 1M Byte packet buffer memory
Voltage input scope	100~245VAC, 50/60Hz -36~ -72VDC < 5 Volts
Built-in power supply	
Environment	Temperature : 0°C - 50°C Humidity 10-90% non condensing
Power	+9V / 600mA maximum
Dimension	213mm x 106mm x 33mm (H x W x D)

Application



Installation

1. FSW2104 optical fiber switch allows adequate ventilation space when you place the switch on top of another device.
2. Check the power line for normal connection.
(please note the DC power source polarity).
3. The fiber port connection: separately inserts 1 group of optical fibers to the FSW2104 optical fiber connection position, paying attention to the direction.
4. The Ethernet installation, inserts the unshielded twisted-wire to the FSW2104 Ethernet ports in the LAN connection. Turn on the power source, examine whether every indicating led is correct (see the LED explanation).

Trouble Shooting

1 LED indicator of fiber type port is not lit?

Answer: First please check the cable to see if connected correctly. If correct, check whether fiber optic transmission distance is greater than the FSW2104 optical fiber switch's maximum range. The FSW2104 optical fiber switch's actual maximum transmitting range is determined by the actual communication line quality. If the optical fiber quality is not good or the attenuation of the fiber connections is high, the optical fiber transceiver transmitting range is reduced.

2 Ethernet link indicator LED is not lit? Answer: Please check whether the twisted pair line is connected to the Ethernet equipment.

3 Some LEDS are not lit?

Answer: After applying the power source, without connecting any line, the normal indications should be: first 6 LEDS are on, a few seconds later, LEDs are off. (PWR) The power LED will be lit while other LEDs are not lit.

TRADEMARKS

Ethernet is a registered trademark of Xerox Corp.

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WARNING:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause harmful interference in which case the user will be required to correct the interference at his own expense. NOTICE: (1) The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. (2) Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

CISPR PUB.22 Class A COMPLIANCE:

This device complies with EMC directive of the European Community and meets or exceeds the following technical standard. EN 55022 - Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment. This device complies with CISPR Class A.

WARNING:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CE NOTICE

Marking by the symbol CE indicates compliance of this equipment to the EMC directive of the European Community. Such marking is indicative that this equipment meets or exceeds the following technical standards: EN 55022:1994/A1:1995/A2:1997 Class A and EN61000-3-2:1995, EN61000-3-3:1995 and EN50082-1:1997