4 Channel 1×2 Optical Switch
FW-OSS-1X2-4-MM-1U

Introduction

The rack-mounted optical switch serves as a crucial optical path control device, enabling manual, short-range, or remote control of optical path switching through buttons, serial port communication, and Ethernet communication. It plays a pivotal role in various optical communication applications including multi-channel optical monitoring in optical transmission systems, LAN multi-light source/detector automatic switching, and dynamic monitoring of multiple points in an optical sensor system. Additionally, it is essential for conducting tests on optical fiber, devices, networks and field engineering cable testing as well as for the installation and adjustment of optical devices.

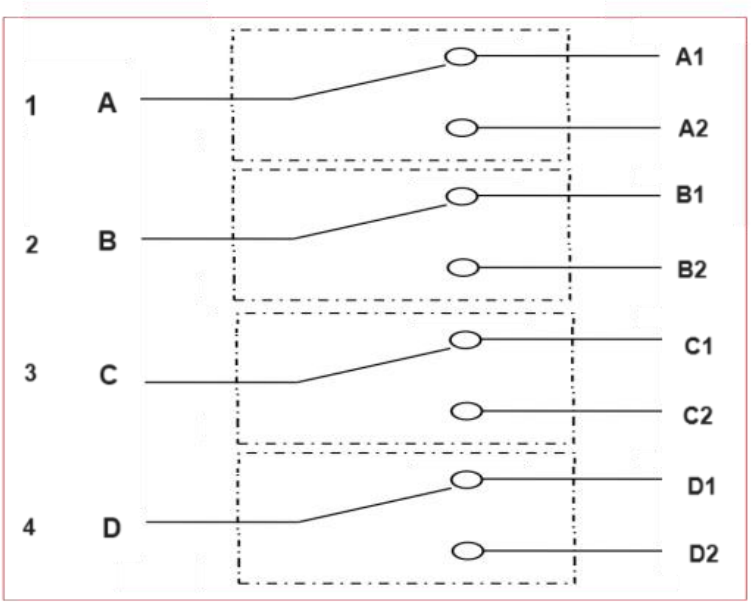
Features

- Low insertion loss, Fast switching.
- Optical switch internal circuit self-detection, fault alarm notification.
- RS232 Control and Ethernet RJ45 Management.
- LED display panel. Visual display, Convenient operation.
- Optical path switching can be controlled through buttons, serial ports, and network ports. And it can be operated by locking the keys through instructions.

Specifications

Parameters	Indicators
Channel No	FW-OSS-1X2-4-MM-1U
Wavelength Range	850
Insertion Loss	≤ 1.2 dB
Repeatability	≤ 0.02 dB
Return Loss	≥ 30 dB
Crosstalk	≥ 35 dB
Wavelength dependent loss	≤ 0.25 dB
Polarization related loss	≤ 0.05 dB
Fiber Type	OM3,50/125um
Connector	FC/APC
Monitoring Port	RJ45、RS-232
Working Power Supply	AC：100~240V
Working Temperature	-10 ~ +60℃
Operating Temperature	-40 ℃ ~ +85 ℃
Size	19 inch standard 1U rack (483 X 230 X 45)

Optical path diagram



Instructions

1.Panel shows

Front panel

(1) RJ45: Ethernet 10/100M communication interface.

(2) RS-232: RS-232 communication interface.

(3) LCD display: device address, current channel and related information display.

(4) ▲ - Move up key; ▼ - Move down key; Enter - OK key; Esc - Cancel the key.

(5) A, B, C, D, A1, A2 to D1 to D2: Input and output terminals of the optical fiber (bidirectional).

(6) Power: device on, off button.

后面板

（1）AC power supply interface

Default Setting

- Device address: 01.
- Device key Permission: Allow.
- Serial port Set to 9600 baud, 8 data bits, and 1 stop bit, without parity check.
- IP address: 192.168.1.100; Communication port: 5000
- Network port protocol: TCP Server , UDP (fixed port: 18888)

Note: Users have special requirements except.

2. Description of communication port connections

(1) RS-232 interface The RS-232 interface of the device uses the DB9 female head, pin 2 is TXD, pin 3 is RXD, and pin 5 is GND.

(2), RJ45 Ethernet interface (10/100M) When the device and the computer are connected through the switch and the device is directly connected to the computer, the through line should be used (the wiring sequence at both ends is: 1-orange white, 2-orange, 3-green white, 4-blue, 5-blue white, 6-green, 7-brown white, 8-brown);