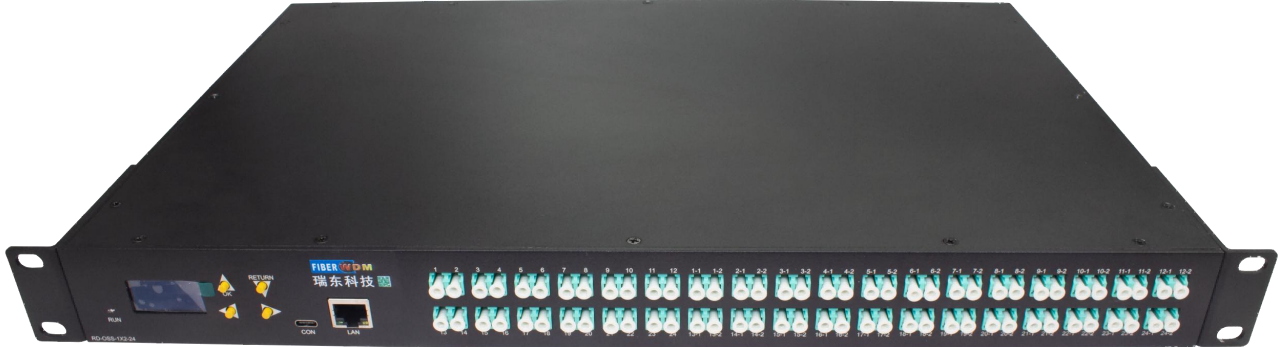# 24 Channel 1×2 Optical Switch

FW-OSS-2X1-24-MM-1U

The rack-mounted optical switch consists of 24 1X2 optical switches, enabling control over the switching of 24 1X2 optical fiber channels. The device is equipped with an Ethernet RJ45 and TYPE-C communication interface, allowing for control via commands or keys. It plays a crucial 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 systems for optical sensors. Additionally, it is utilized in the testing of optical fibers, devices, networks, field engineering cables as well as the installation and adjustment of optical devices.

Features

◆ Low insertion loss, Fast switching.

◆ TYPE-C Control and Ethernet RJ45 Management.

◆ The serial port adopts TYPE-C female interface.

◆ Optical path switching can be controlled through buttons, serial ports, and network ports. And it can be operated by locking the keys through instructions.
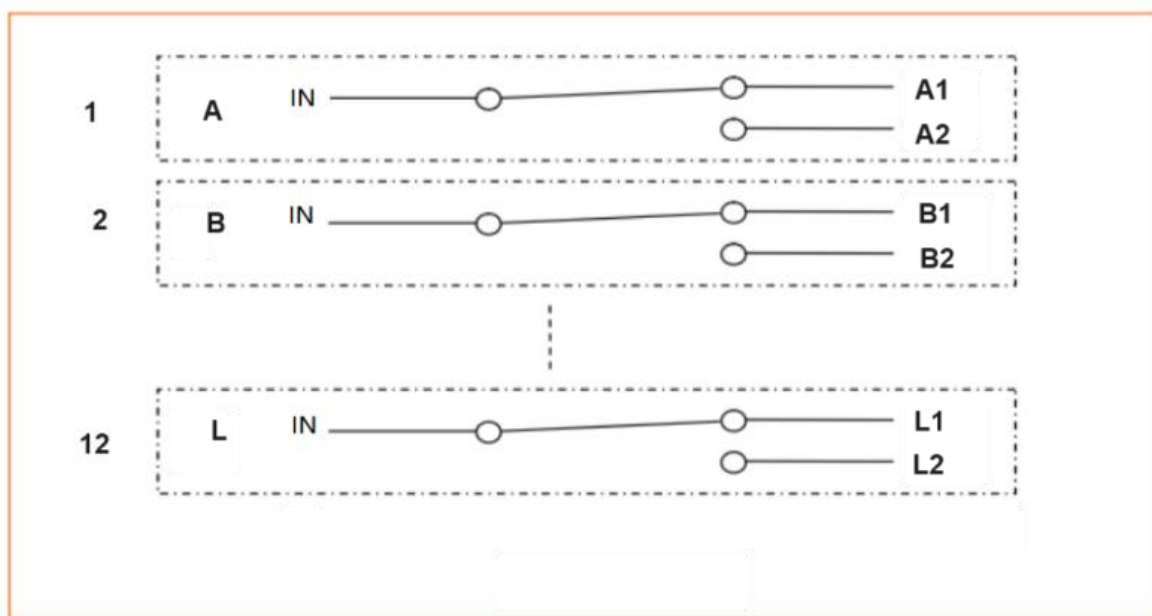
Specifications

Parameters	Indicators
Channel No.	FW-OSS-2X1-24-MM-1U
Wavelength Range	850nm ±50nm

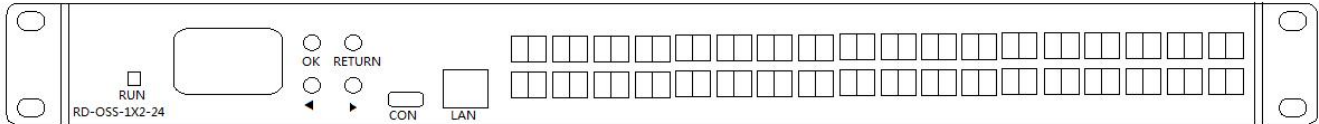| Test wavelength	850nm
Insertion Loss	≤ 1.2 dB
Repeatability	≤ ±0.02 dB
Return Loss	≥ 30 dB
Crosstalk	≥ 35 dB
Wavelength dependent loss	≤ 0.25 dB
Polarization related loss	≤ 0.05 dB
Switching Time	≤12 ms（Adjacent channels）
Fiber Type	MM（50/125um）
Connector	LC\PC
Monitoring Port	RJ45、TYPE-C
Working Power Supply	AC：100~240V
Working Temperature	-10 ~ +60℃
Operating Temperature	-40 ℃ ~ +85 ℃
Size	19 inch standard 1U rack (483 X 230 X 44)

Optical path diagram

Instructions

1.Panel shows

Front panel

(1) RJ45 Ethernet port, TPYE-C serial port: communication interface for device monitoring data.

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

(3) ▲ - Move up key; ▼ - Move down key; Enter - OK key; RETURN - Cancel the key.

(4) Optical interface description: optical interface.

Rear panel

（1）AC power supply interface

Default Setting

◆　When starting up, the 24 channels are connected by default.

◆　Device key permission: Allow

◆　Serial port: 9600 baud, 8 data bits, 1 stop bit, no parity check.

◆　IP Address: 192.168.1.100; Communication port: 5000

◆　Network port protocol type: TCP Server , UDP (fixed port: 18888)

Note: Users have special requirements except.

2. Description of communication port connections

(1)TYPE-C interface