

1xN Rack-Mounted Optical Switch

OPTICAL SWITCH FEATURES

- ✓ Low Loss and High Reliability
- ✓ AC/DC Flexible Dual Power Supply
- ✓ Parallel Interface (RS232, RJ45)
- ✓ LCD Display Module for Light Path Status Displays
- ✓ Breakdown Self-checking and Alarm Warning (LCD Display)

OPTICAL SWITCH APPLICATIONS

- Optical Signal Switching and Routing
- Optical Network Monitoring
- Testing of Fiber Optic Component
- Military Communications



Specifications of the Rack-Mounted Optical Switch

Channel Number (N)	1<N≤64		64<N≤128	
Insertion Loss (dB)	Typ: 0.5; Max:1.0		Typ: 1.0; Max:1.5	
Operating Wavelength (nm)	1260~1650 (SM)	532~1064/1310 (MM)		Custom
Testing Wavelength (nm)	1310/1490/1550/1625	532/650/780/850/980/1310		Custom
Return Loss (dB)	SM (9/125) ≥ 50; MM (50/125, 62.5/125) ≥ 30			
Crosstalk (dB)	SM (9/125) ≥ 70; MM (50/125, 62.5/125) ≥ 70			
Polarization Dependent Loss (dB)	≤0.05			
Wavelength Dependent Loss (dB)	≤0.25			
Temperature Dependent Loss (dB)	≤0.25			
Repeatability (dB)	≤0.02			
Lifetime (cycles)	10 ⁷			
Switching Time (ms)	≤10 (adjacent channel)			
Optical Input Power (mW)	≤500			
Working Voltage (V)	AC 85-256V (Typ. 110V, 220V), DC 36-72V (Typ. 48V), or Dual Power Supply			
Operating Temperature (°C)	0 ~ +70			
Storage Temperature (°C)	-40 ~ +85			
Dimension / Channel Number (mm/N)	1U: 483 x 250 x 44.5	2U: 483 x 250 x 89	3U: 483 x 250 x 133.5	4U: 483 x 250 x 178

Notes:

1. Above data are test results with connectors assembled.
2. The Rack-Mounted Optical Switches are customizable and subject to change without notice.
3. For product customization or special requirement, please contact Lfiber's sales representative.



Optical Components, Fiber Optic Devices, Modules, and more.

More support, visit: www.lfiber.com

Email: sales@lfiber.com

Control Methods of the Rack-Mounted Optical Switch

It provides three methods to control the device.

- Method 1: Use the button on the rack panel.
- Method 2: Use the RS232 / USB interface.
- Method 3: Use the RJ45 interface.

Method 1 is the simplest, you can easily control the rack-mounted optical switch using the button on the rack panel.

By method 2, the rack-mounted optical switch is easily controllable through LabVIEW and Python.

If there is a need, we can offer software solutions (based on Microsoft Windows OS) so that you can easily control the optical switches (even though you don't have any knowledge about programming) via the RS232 / USB interface on your computer.

The software is programmed with Visual Basic (VB). We can provide the source code if customers need it.



Ordering Information for the Rack-Mounted Optical Switch

	Port/Channel Number	Test Wavelength	Fiber Type	Rack Mount	Connector
Rack-mounted Optical Switch	1~128	850 nm	9/125 μm (SMF)	1U	None
		1310 nm	50/125 μm (MMF)	2U	LC/PC
		1550 nm	62.5/125 μm (MMF)	3U	LC/APC
		1310/1550 nm	105/125 μm (MMF)	4U	SC/PC
		Custom ...	200/220 μm (MMF)	Custom ...	SC/APC
			400/440 μm (MMF)		FC/PC
			600/660 μm (MMF)		FC/APC
			800/880 μm (MMF)		Custom ...
	Custom ...				

