Optical switching equipment FW2600-32X32LCU-A
32×32 single-mode 1310/1550nm LC/UPC 1U chassis

The FW2600-32X32LCU-A rack-mounted optical switching device consists of MEMS optical switches and enables the switching of optical fiber paths among 32 input channels and 32 output channels. The device features an Ethernet RJ45 communication interface, allowing switching to be controlled via a graphical network management interface; it also provides a set of TCP/IP protocol communication commands. Optical switching devices play a critical role in optical communication applications, primarily in multi-channel optical monitoring and switching within optical transmission systems, test and simulation systems, fiber-optic sensing systems, and the commissioning and testing systems for optical components.

Product Features

- Mature MEMS technology features low insertion loss, rapid switching speeds, and other advantages.
- Fully bidirectional, fully optical, non-blocking switching
- Ethernet communication interface control provides a graphical control interface, making operation convenient and straightforward. It enables remote and centralized management.
- An LCD display is used to provide a highly intuitive visualization of the device IP address, facilitating user operation.

Reference Standard

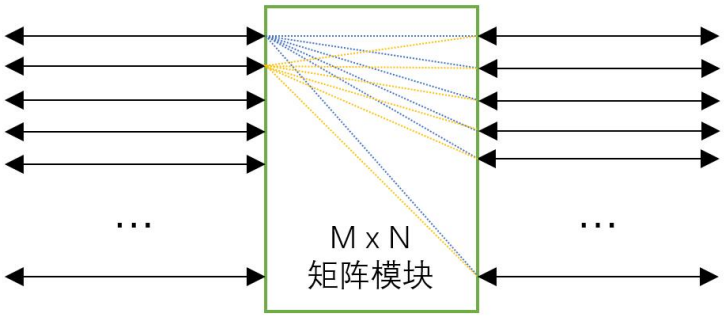
- Telcordia GR-1221
- Telcordia GR-1073
- RoHS requirements

Performance Index

name	parameter
model	FW2600-32X32LCU-A
Cross-switching specifications	32X32
operating wavelength	1260~1650
Test wavelength	1310/1550

insertion loss	≤ 3.5 dB
repetitiveness	≤ ±0.05 dB
return loss	≥ 50 dB
Crosstalk	≥ 55 dB
Wavelength-dependent loss	≤ 0.25 dB
Polarization-dependent loss	≤ 0.05 dB
switching period	≤20 ms
Fiber type	SMF-28E
Enter optical power	≤500mW
life span	$\geq 10^9$
Connector type	LC\UPC
Management port	RJ45
working power supply	AC：100~240V
working temperature	-10～+60℃
Storage temperature	-40 ℃ ～+85 ℃
Chassis type	19-inch standard 1U rack (482 × 390 × 44)

Optical path diagram



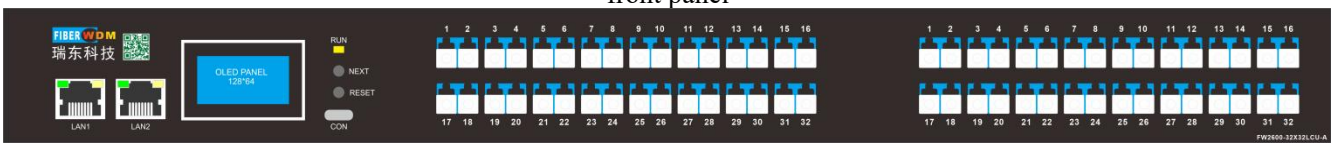
An M×N all-optical switching matrix is formed by cascading M 1×N MEMS optical switches with N 1×M MEMS optical switches, enabling arbitrary switching among M optical signals and N optical signals. The optical switch matrix offers high port density, fast switching speeds, low power consumption, and a flexible, configurable topology.

Note: The input and output optical paths are reversible.

Equipment Specifications

1. Equipment Panel Diagram

front panel



(1) LAN1/LAN2: RJ45 Ethernet interface; device management and communication interface.

(2) LCD display: display of the device IP address and related information.

(3) Next: Flip down to view the button

(4) Reset: Reset button

(5) Run indicator: equipment operation indicator

(6) Con: Console debugging interface

(7) User optical interface: 32×32 LC/UPC.

back panel



(1) AC power interface: the power input interface for device operation.

2. Equipment Dimensional Drawing

