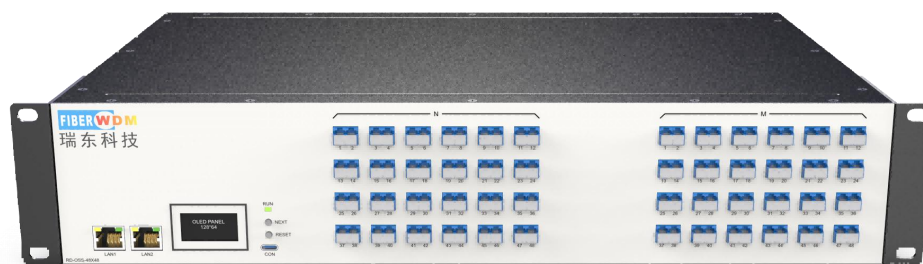


48X48 Fiber Optical Switch 1270-1610nm SM LC/UPC 1U Rack

FW-OSS-48X48

The FiberWDM's MEMS Optical Switch, FW-OSS-48X48, is a high-performance, fully non-blocking and port-configurable all-optical matrix switch powered by series of patented technologies. FW-OSS-48X48 comprises 96 peer fiber ports that can be connected each other one on one freely. With no hardware defined input or output ports, FW-OSS-48X48 can be configured to any combination of symmetric ($N \times N$) or asymmetric ($N \times M$) switch configurations through the GUI and embedded software developed by FiberWDM. Moreover, through Software-defined grouping, all ports can be divided into any feasible counts of groups with any feasible port counts under the only limitation of total port counts. Specifically, each group can be controlled independently. The combination of software control and peer fiber port connectivity brings a new level of flexibility and possibilities for customers to optimize their solutions. FW-OSS-48X48 is a versatile, easy-to-implement and high-performance optical switch which can be used across a range of applications.



FW-OSS-48X48

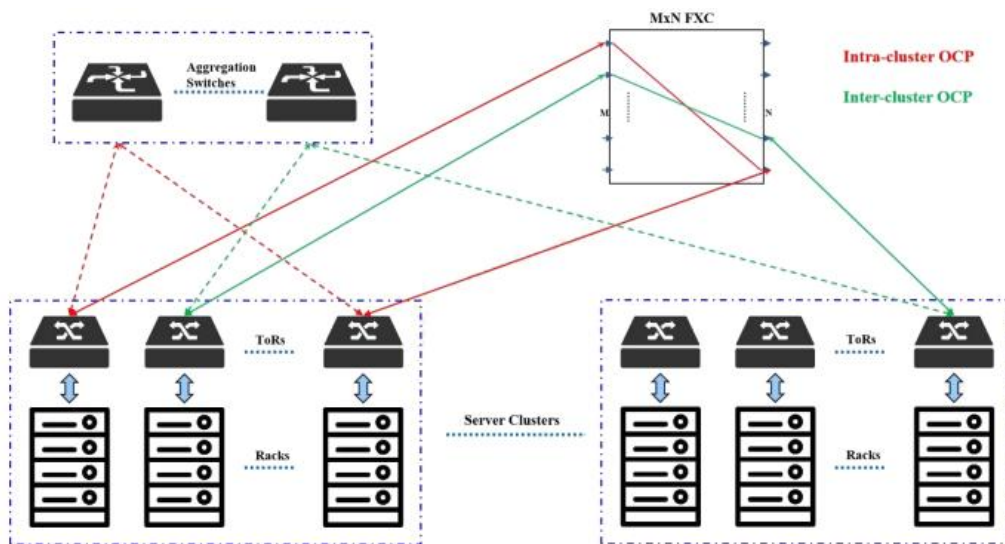
Key Features

- ◆ Non-blocking matrix switch
- ◆ Port-configurable
- ◆ P2P port connectivity
- ◆ Software-defined grouping
- ◆ Alternate fiber port protection
- ◆ High density switching in a compact chassis
- ◆ Exceptional optical stability and repeatability
- ◆ User-friendly GUI
- ◆ Optional Low-frequency switching modulation

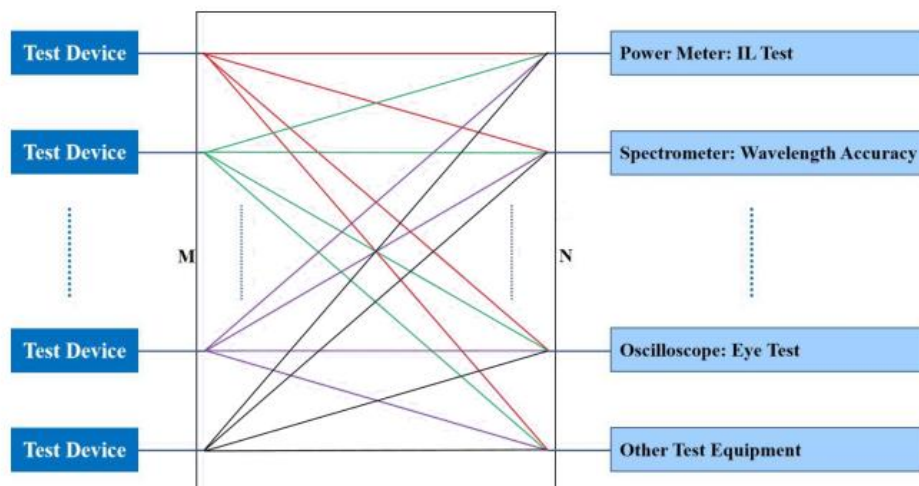
Applications

- ◆ Optical signal routing
- ◆ Optical link protection
- ◆ Automated testing
- ◆ Multiple device testing
- ◆ High performance computing
- ◆ Network monitoring and automatic fault location

Application - Optical network routing



Application - Automation test



Performance Parameters

Total number of fiber ports	96or others		
Matrix Switch Sizes	48*48		
Operating Wavelength Range	1260 ~ 1660 nm		
Typical Insertion Loss ¹	2.4 dB		
Maximum Insertion Loss ¹	2.6 dB		
Crosstalk	> 45 dB		
Return Loss	> 50 dB		
Polarization Dependent Loss	< 0.35 dB (C or L Band)		
Wavelength Dependent Loss	< 0.6 dB (C or L Band)		
Switching Time	< 10 ms		
Repeatability	± 0.1 dB		
Durability	> 10 ⁹ Cycles		
Electrical and Mechanical			
Fiber Type	G657.A2		
Single Fiber Connector Types ²	LC/APC		
Switch Chassis Dimension	440mm×260mm×88mm		
Control Interface	RJ45/serial port		
Power Options	100-240 VAC 50/60 Hz Or 48 VDC		
Power Consumption	< 15 W		
Environment Conditions	Min.	Max.	Units
Operating Temperature	-5	70	°C
Storage Temperature	-40	85	°C
Operating Relative Humidity ³	5	9	%
Storage Relative Humidity ³	5	95	%

Note:

1. Measured with LC/APC connectors.
2. Connector types can be customized with customers' requirements.
3. Not to exceed industrial standard of 0.024 kg water per kg of dry air. Under Non-condensing Conditions.