Product: 360 Series MEMS Optical Matrix Switch

Part Number	Spec Number	Version	Date
MOS360D**XXX**TSS01	S057	Rev 01	04/01/2024

1 Function Diagram
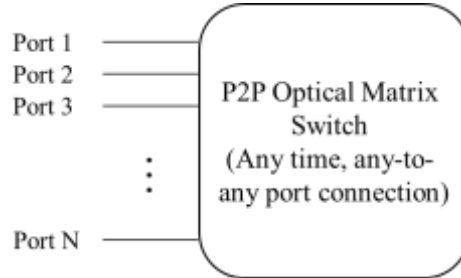
The 360 series Optical Matrix Switch comprises N equivalent optical fiber ports (total port count customizable based on requirements), allowing any two ports to be interconnected at any given time.

2 Specifications

2.1 Environment Conditions

Item	Parameters	Min	Max	Units	Note
1.	Operating Temperature	-5	70	°C	
2.	Storage Temperature	-40	85	°C	
3.	Operating Relative Humidity	5	95	%	[1]
4.	Storage Relative Humidity	5	95	%	[1]

Note:
[1] Not to exceed industrial standard of 0.024 kg water per kg of dry air under non-condensing conditions.

2.2 Specifications

Item	Parameters	Specifications			Units	Note
5.	Channel Number	≤ 32	≤ 68	≤ 132	\	
6.	Operation Wavelength Range	1260 ~ 1660			nm	
7.	Typical Insertion Loss	1.7	2.0	3.0	dB	[2]
8.	Maximum Insertion Loss	2.5	3.0	3.5	dB	[2]
9.	Cross Talk	> 45			dB	
10.	Return Loss	> 50			dB	[2]
11.	Polarization Dependent Loss	< 0.2 (C or L Band)			dB	
12.	Wavelength Dependent Loss	< 0.3 (C or L Band)			dB	
13.	Durability	> 10^9			Cycles	G
14.	Repeatability	± 0.1			dB	
15.	Switch Time	< 50			ms	G

Note:
[2] The specifications are for device with LC/APC connectors.
G: Guaranteed by design.

## 2.3 Electrical and Mechanical Specifications

2.3.1 Specifications

Item	Parameters	Specifications			Note
		≤ 32	≤ 68	≤ 132	
1.	Fiber Type	G.657 A2			
2.	Chassis Dimension	2 Unit Rack		4 Unit Rack	
3.	Connector Type	LC/APC			[3]
4.	Control Interface	RS232 / USB			
5.	Power Consumption	< 8 W	< 15 W	< 30 W	
6.	Power Options	100-240 VAC 50/60 Hz or 48 VDC			

Note:

[3] Connector types can be customized with customers' requirements.

2.3.2 Drawings

2 Unit (for Channel Number less than 68):
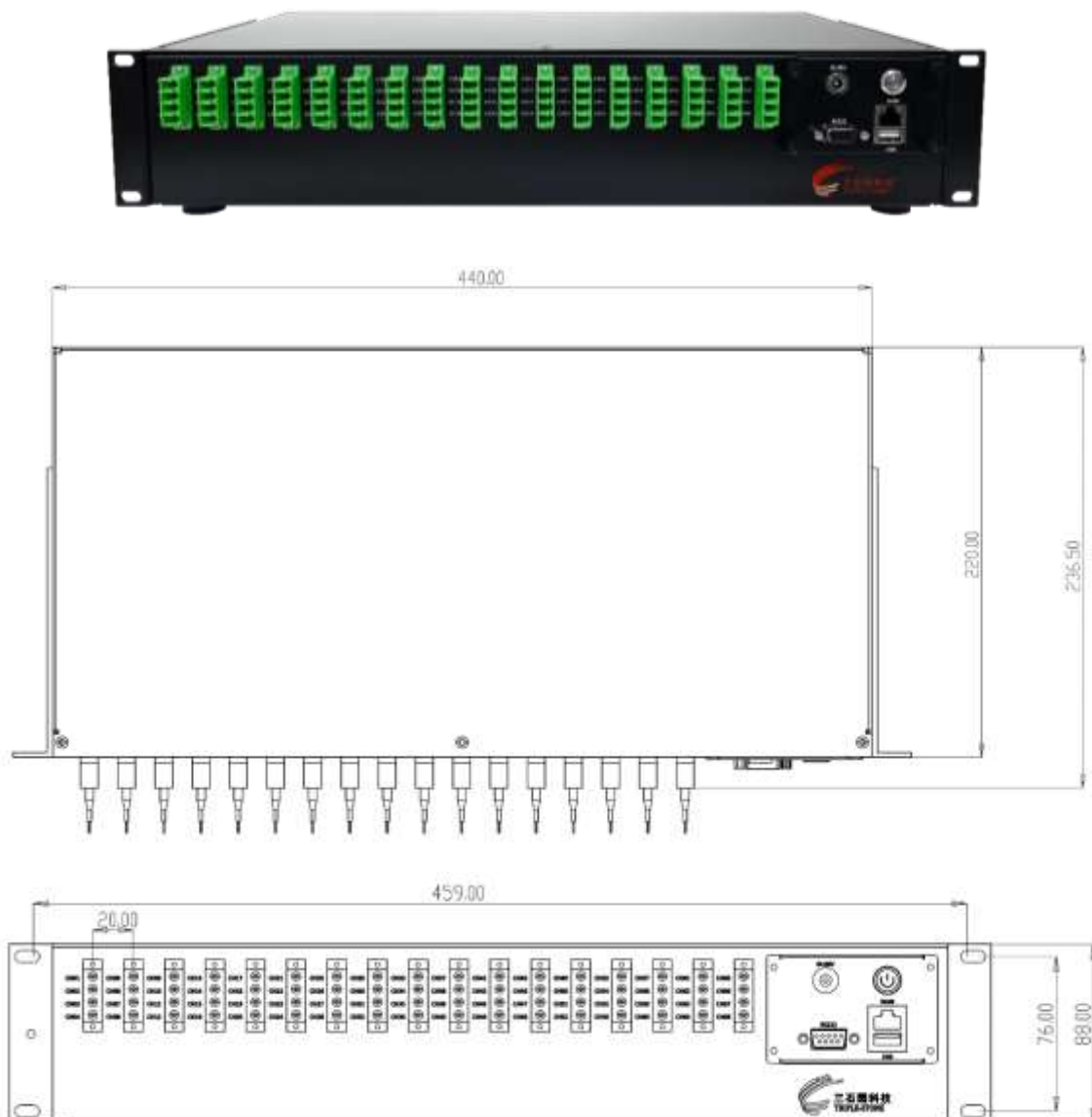
3 Device Label, Delivery Data

Triple-Stone standard format.

4 RoHS

RoHS compliant.

5 Order Information

Part Number: MOS360D**XXX**TSS01

"**XXX**" means the port number of the Optical Matrix Switch, 16, 24, 32, 68, 132 ports are available.