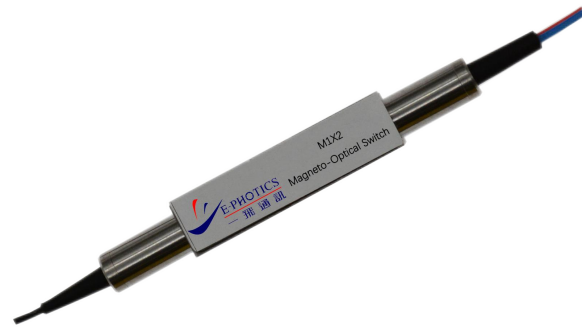


# M1x2 Magneto-Optical Switch(High-Power)

## Features

- Solid-state high speed
- High Stability, High Reliability
- Epoxy-free on Optical Path
- Fail-safe latching



## Applications

- Optical switching
- Fault Protection
- Time Delay measurement
- System monitoring
- Sensing system

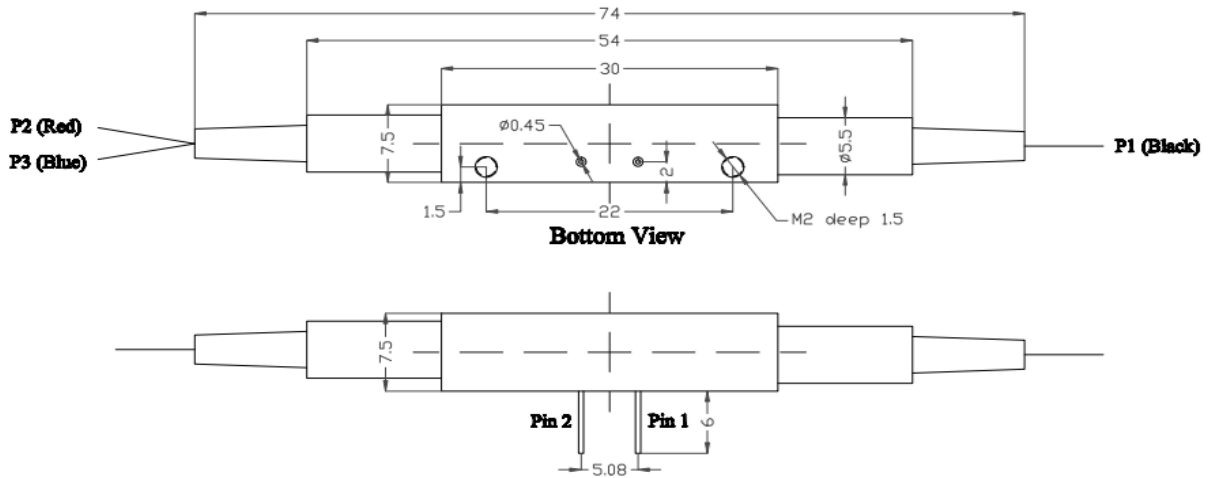
## Product Description

The M1x2 optical switch is connected to the optical path by connecting or blocking the optical signal. the switch has non-mechanical configurations and activated via an electrical control signal. The switch also has build-in circulator and isolator functions. Products are widely used in aerospace and military equipment. The switch is designed to withstand high-power /high-energy lasers in such applications as LIDAR.

# Performance Specifications

Parameters	Unit	Specifications
Wavelength Range	nm	1520 ~ 1580
Test Wavelength	nm	1550
Insertion Loss <sup>1,2</sup>	dB	≤ 1.0
TDL	dB	≤ 0.30
PDL	dB	≤ 0.20
Return Loss	dB	≥ 50
Crosstalk	dB	Bidirectional ≥ 20
		Unidirectional ≥ 40
Repeatability	dB	≤ ±0.01
Switching Time	us	≤ 100
Pulse Duration	us	≥ 200
Durability	Cycles	≥ 100 Billions
Switch Type	NA	Latching
Operating Current	mA	≤ 200
Maximum Optical Power	W	5
Operating Temperature	°C	-5 ~ +70
Storage Temperature	°C	-40 ~ +85
Dimension	mm	(L)30.0×(W)7.5×(H)7.5 ±0.2
Note: 1 Test at room temperature and SOP. 2 Excluding connectors, 0.2dB for one pair connectors. 3. Higher power-handling available upon request.		

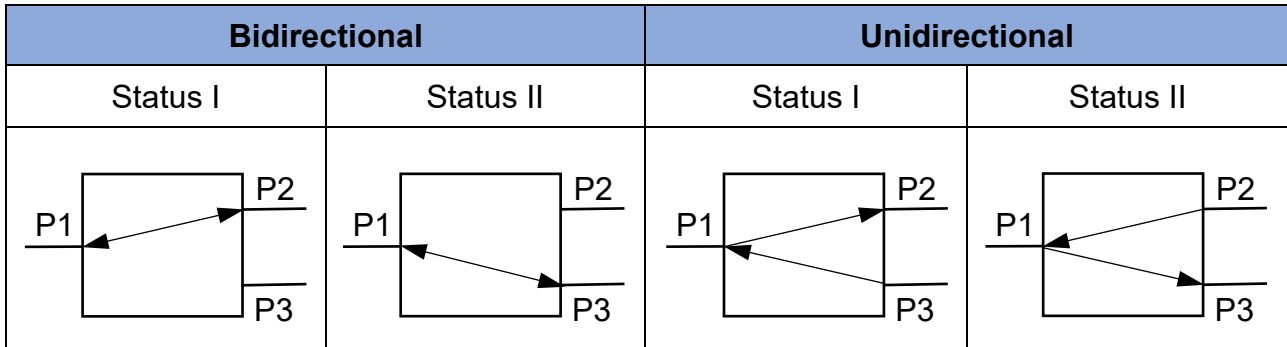
# Mechanical Dimensions (Unit:mm)



# Electrical Drive

Type	Status	Optical Route	Electric Drive	
			Pin 1	Pin 2
M1x2			Pin 1	Pin 2
Bidirectional	I	P1 ↔ P2	GND	V+
	II	P1 ↔ P3	V+	GND
Unidirectional	I	P1 → P2 P1 ← P3	GND	V+
	II	P1 → P3 P1 ← P2	V+	GND

# Functional Diagram



# Ordering Information

YFS-M1x2-□-□-□-□-□-□-□

—□	—□	—□	—□	—□	—□	—□
Switch Type	Fiber Type	Voltage	Wavelength	Tube Type	Fiber Length	Connector
H: Hi-power: 100μJ for pulsed or 5W for CW	SM: SM, 9/125 X: Others	2.5: 2.5V 5.0: 5.0V	1550: 1550nm X: Others	250: 250um 900: 900um X: Others	05: 0.5m±5cm 10: 1.0m±5cm X: Others	OO: None FC: FC/PC FA: FC/APC SC: SC/PC SA: SC/APC LC: LC/PC X: Others