

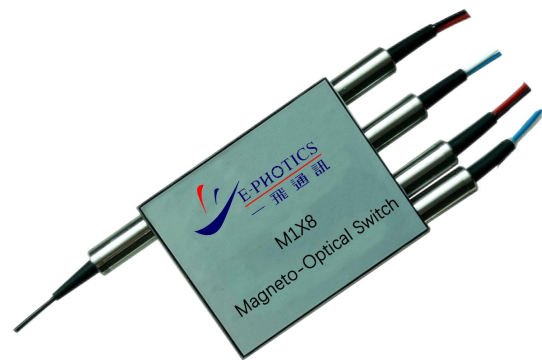
M1x8 Magneto-Optical Switch

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

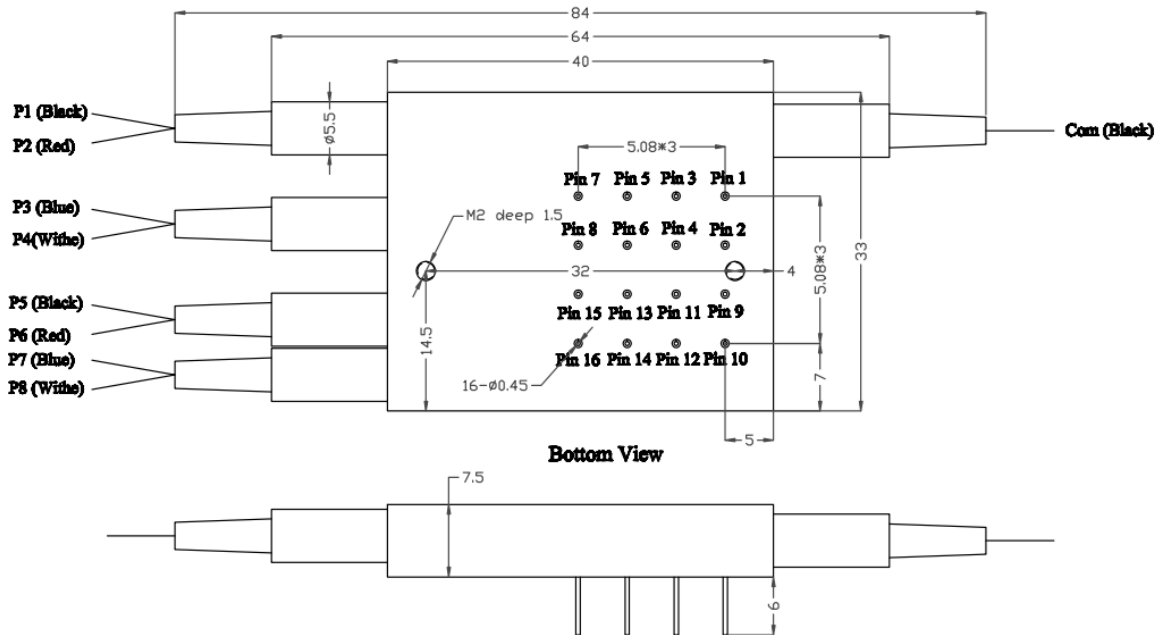
The M1x8 optical switch is connected to the optical path by connecting or blocking the optical signal. The switch has non-mechanical configurations and activated via an electrical control signal. The switch also has build-in circulator and isolator functions.

Products are widely used in aerospace and military equipment.

Performance Specifications

Parameters	Unit	Specifications
Wavelength Range	nm	1520 ~ 1580
Test Wavelength	nm	1550
Insertion Loss ^{1,2}	dB	≤ 2.0
TDL	dB	≤ 0.30
PDL	dB	≤ 0.20
Return Loss	dB	≥ 50
Crosstalk	dB	Bidirectional ≥ 40
		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	mW	≤ 500
Operating Temperature	°C	-5 ~ +70
Storage Temperature	°C	-40 ~ +85
Dimension	mm	(L)40.0×(W)33×(H)7.5 ±0.2
Note: 1 Test at room temperature and SOP. 2 Excluding connectors, 0.2dB for one pair connectors.		

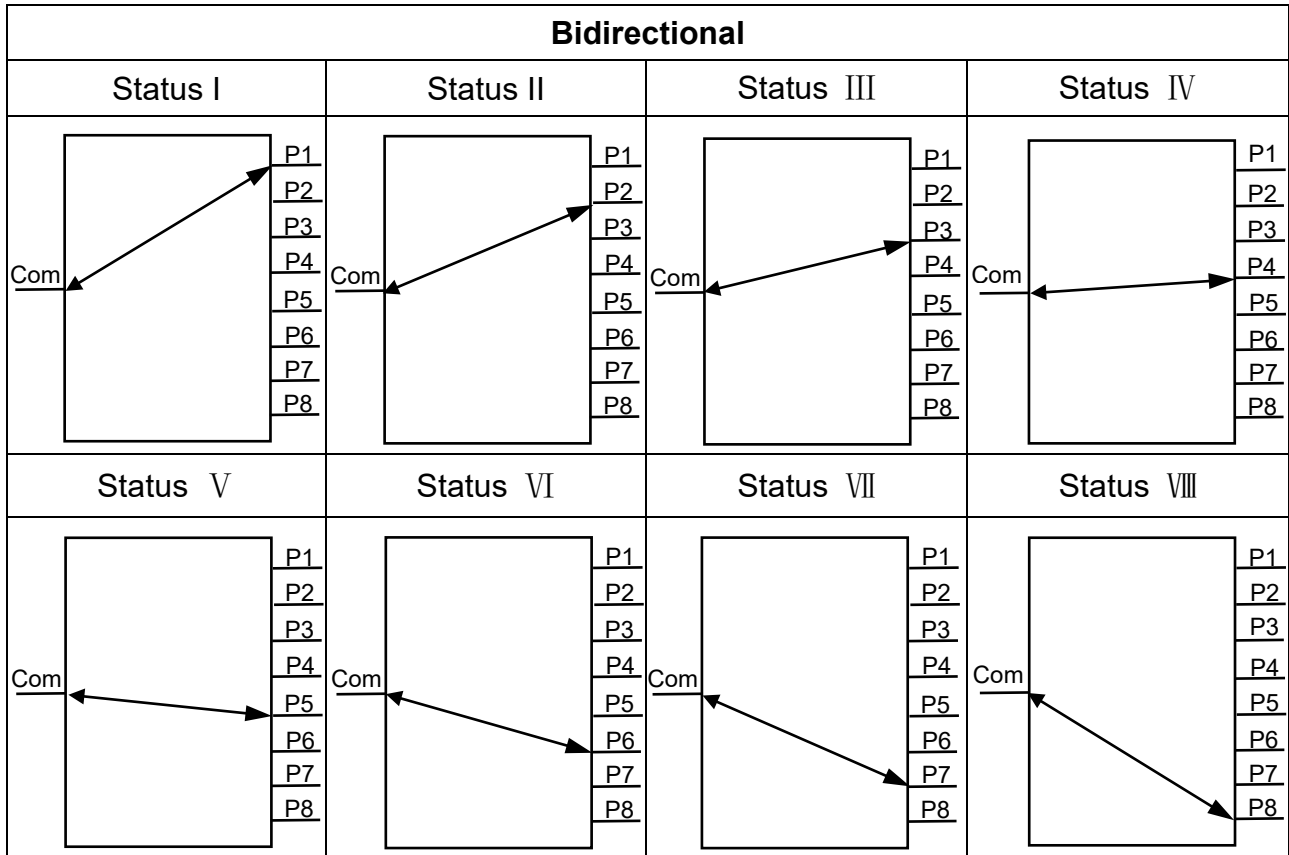
Mechanical Dimensions (Unit:mm)



Electrical Drive

Type	Status	Optical Route	Electric Drive															
			Pin Group A		Pin Group B		Pin Group C		Pin Group D		Pin Group E		Pin Group F		Pin Group G		Pin Group H	
			Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9	Pin 10	Pin 11	Pin 12	Pin 13	Pin 14	Pin 15	Pin 16
M1x8	I	Com-P1	V+	GND	V+	GND	V+	GND	V+	GND	GND	V+	V+	GND	GND	V+	GND	V+
	II	Com-P2	GND	V+	GND	V+	V+	GND	V+	GND	GND	V+	V+	GND	GND	V+	GND	V+
	III	Com-P3	V+	GND	GND	V+	GND	V+	GND	V+	V+	GND	V+	GND	GND	V+	GND	V+
	IV	Com-P4	GND	V+	V+	GND	GND	V+	GND	V+	V+	GND	V+	GND	GND	V+	GND	V+
	V	Com-P5	V+	GND	GND	V+	GND	V+	V+	GND	GND	V+	GND	V+	V+	GND	GND	V+
	VI	Com-P6	GND	V+	V+	GND	GND	V+	V+	GND	GND	V+	GND	V+	V+	GND	GND	V+
	VII	Com-P7	V+	GND	GND	V+	GND	V+	V+	GND	GND	V+	V+	GND	GND	V+	V+	GND
	VIII	Com-P8	GND	V+	V+	GND	GND	V+	V+	GND	GND	V+	V+	GND	GND	V+	V+	GND

Functional Diagram



Ordering Information

FSW-M1x8-□-□-□-□-□-□-□

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Switch Type	Fiber Type	Voltage	Wavelength	Tube Type	Fiber Length	Connector
B:	SM:	2.5:	1550:	250:	05:	OO: None
Bidirectional	SM, 9/125	2.5V	1550nm	250um	0.5m±5cm	FC: FC/PC
U:	X:	X:	X:	900:	10:	FA: FC/APC
Unidirectional	Others	Others	Others	900um	1.0m±5cm	SC: SC/PC
				X:	X:	SA: SC/APC
				Others	Others	LC: LC/PC
						X: Others