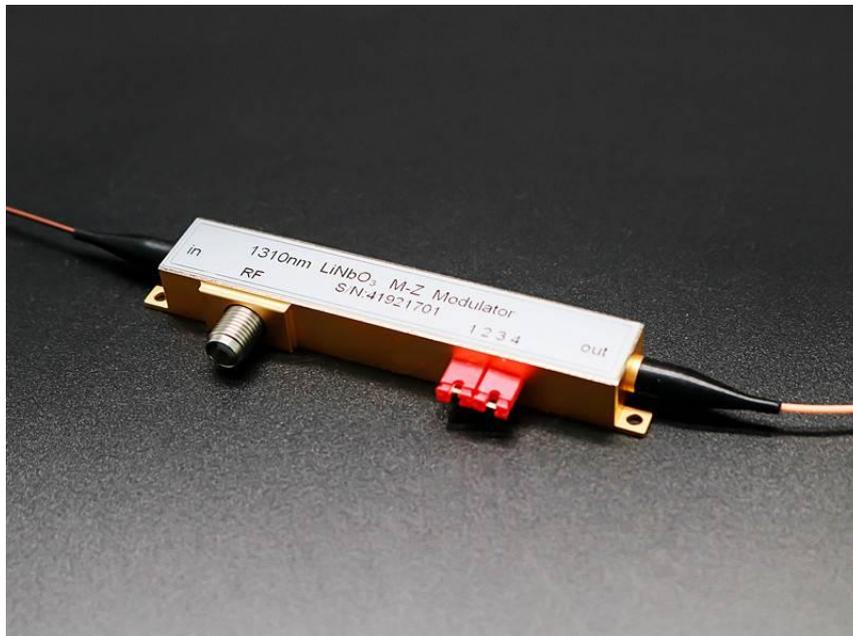


1064nm LiNbO₃ High Frequency Phase Modulator 10GHz



● Product Description

1064/1310/1550nm LiNbO₃ high frequency phase modulator uses titanium diffusion or proton exchange process to make optical waveguide, the input and output optical fiber and waveguide are precisely obliquely coupled, and the electro-optical effect of lithium niobate material is used to



realize the phase modulation of optical signal. Titanium diffusion (Ti-indiffusion) or proton exchange (APE) waveguide process can obtain double refraction or single polarization phase modulation respectively.

- **Product features**

Low insertion loss 、 Low drive voltage 、 Titanium diffused or proton exchange waveguide、 Excellent long-term stability

- **Part Number**

MP-EOM-PM-1064-10G-FA

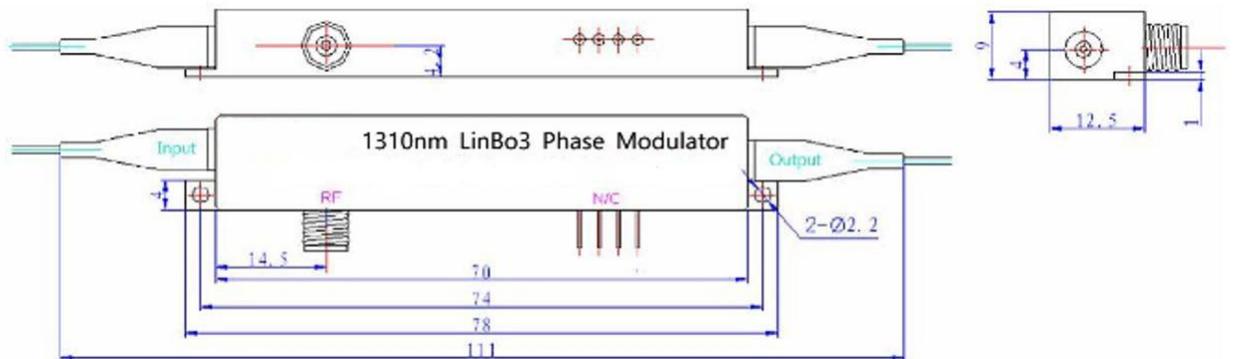
- **Application area**

Fiber optic communications 、 Microwave photons 、 Quantum communications、 Optical sensing、 Optical chirp

- **Core parameters**

Wavelength	Bandwidth	Half-wave Voltage
1064nm	10GHz	3.5V

● Dimension Drawing



● General Parameters

Electrical/optical properties (Tsub=25 °C, CW):

Parameters	Unit	Min.	Typ.	Max.
Model		MP-EOM-PM-1310/1550-10G-PM-FA		
Half-wave voltage DC electrode	V		3.5	4.5
Electro-optical bandwidth S21@-3dB	GHz	10		20
RF half-wave voltage @DC	V		3.5	4.0
Bias half-wave voltage	V			5.0
Jitter	dB		0.5	1

Electrical return loss S110-20GHz	dB		-12	-10
RF connector input resistance	Ω		40	
Input impedance DC connector	Ω		> 1 M	
Crystal: Lithium Niobate	.	X-cutY-propagation		
Waveguide process		APE Technology		
Insertion loss	dB		3.0	4.0
Optical return loss	dB		<-45	
Wavelength-dependent loss (1480-1600nm)	dB		0.5	1.0
DC extinction ratio	dB	20	22	
Input fiber		Panda PM FIBER1.5m length, 900um		
Output fiber		SMF-28SMFiber1.5length, 900um(PMF Optional)		
Input RF connector		SMA		
DC connector		Pinfeed-through diameter: 1.0mm		
Package size	mm	110x12.5x9.0		



Operating temperature	°C	0~+70
Storage temperature	°C	-40~+85
DC input maximum voltage	V	±20
Maximum RF input power	dBm	+28
Maximum input optical power	mW	200(APE Technology)

Order Info:

MP-PM-W-BW-Y-Z-AB-CD

PM:PhaseModulator

W_Wavelength:

0850:850nm

1064:1064nm

1310:1310nm

1550:1550nm

BW: Bandwidth

0.3G>300MHz

10G>10GHz



Y: Input Fiber

P: PM Fiber

S: SM Fiber

Z: Output Fiber

P: PM Fiber

SSM Fiber

AB: Input fiber connector

00: bare Fiber FAFC/ APC

FCFC/ SPC

CD: Output fiber connector

00: bare fiber

FA: FC/ APC

FC: FC/ SPC