

1550nm Fiber Coupled Acousto-Optic Modulator / Frequency Shifter Series Products



◆ Description

The **acousto-optic modulator** is an optoelectronic product that uses the principle of acousto-optic interaction to perform amplitude modulation and frequency shift processing on the laser. The wavelength ranges from 300nm to 2000nm. It adopts a metal shell design, a compact structure and good sealing effect. The innovative packaging technology ensures high Reliability and temperature stability.

Performance Characteristics	<ul style="list-style-type: none"> ■ Fast Response Time ■ Low Insertion Loss ■ High Extinction Ratio ■ High Temperature Reliability ■ Compact Package
Applications	<ul style="list-style-type: none"> ■ Hydrophone System ■ Fiber Sensor ■ Fiber Ranging System ■ Lidar nonlinear correction system ■ Fiber Sensor
Technical Index	Below are 1550nm device performance indicators (Frequencies and Wavelengths can be Customized According to Requirements)

◆ Ordering Information

AOM-①-②-③-④-⑤-⑥-⑦-⑧-⑨-⑩

1-Signal	2-Frequency	3-Handling Power	4-Function	5-Package
1064 - 1064nm	200M - 200MHz	05 - 500mW	S - Frequency Shifting	C1 - 60*25*12(mm)
1550 - 1550nm	100M - 100 MHz	10 - 1W	A - Amplitude	G3 -
1310 - 1310nm	80M - 80MHz	30 - 3 W		G6 -
6-Fiber Type	7-Pigtail Length	8-Fiber Jacket	9-Jacket Length	10-Connector
PM980 - PM980	1 - 1M	0 - Bare Fiber	0 - No Jacket	FA - FC/APC
PM1550 - PM1550	1.5 - 1.5M	1-900 μ m Loose	1 - 1M	FU - FC/UPC
SMF28e - SMF28e	S - Specify		S - Specify	N - NONE

◆ Specification

Parameter	Unit	Value				
Interaction Material		TeO ₂				
Frequency	/	35-80MHZ	100-120MHZ	150MHZ	200MHZ	300MHZ
Signal Wavelength (λ_c)	nm	1520~2000				
Max. Insertion Loss	dB	2.0	2.0	3.5	4.5	6.5
Min. Polarization Extinction Ratio	dB	20				
Min. Extinction Ratio (Turn On/Off)	dB	50s			60	
Max. Voltage Standing Wave Ratio(VSWR)	/	1.2:1		1.5:1		
Max. Rise-Time/Fall-Time(10%-90%)	ns	< 60		< 20	< 10	< 7
Frequency Shifting	MHZ	35-80	100-120	150	200	300
3dB Bandwidth Range	MHZ	-	-	> 30	> 50	> 80
Max. Average Optical Power	mW	500(Other Power Available On Request)				
Peak Power	kW	1 (Other Peak Power On Request)				
Input Impedance	Ω	50				
Max. RF Power	W	2.5				
Fiber Type	/	PM1550/SMF28e				
Operating Temperature	$^{\circ}\text{C}$	-10 to+65				
Storage Temperature	$^{\circ}\text{C}$	-20 to+70				

*Connector key is aligned to slow axis.