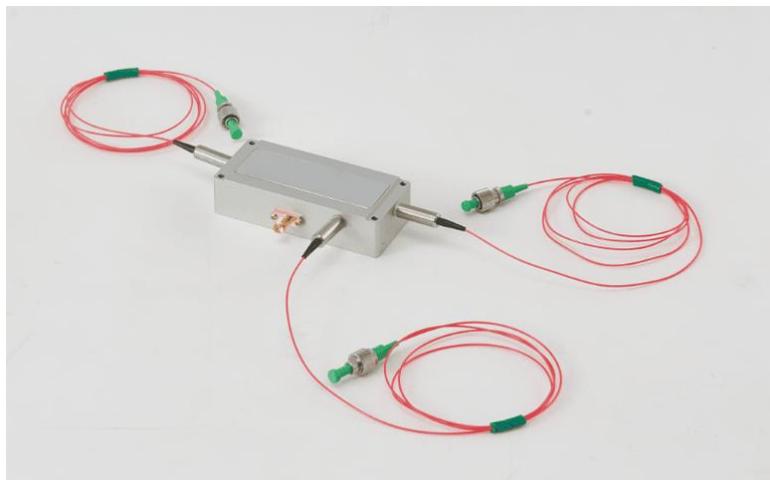


# 1550nm Dual-Output Fiber Coupled Acousto-Optic Device (All-Fiber Acousto-Optic Modulator)



## ● Product Description

IdealPhotonics all-fiber acousto-optic modulator allows users to change the output light amplitude, duration, and period/frequency. Insertion loss can be as low as 2 dB, extinction ratio can reach up to 50 dB, rise time can be as low as 5 nanoseconds, and periodicity can reach hundreds of MHz. Applications include switching, pulse picking, fast attenuators, etc. The wavelength range spans from near ultraviolet to near infrared. A special application of the modulator is the programmable attenuator. Attenuators are key components in the design of fiber optic transmission systems. They



are used to match the optical power level with the dynamic range of the receiver, adjust the input and output levels in EDFA, equalize the power between different DWDM channels, and test the overall system performance under different optical power conditions.

## ● Product features

0th and 1st order optical fiber output、 Polarization-maintaining or single-mode fiber input/output、 High extinction ratio、 Customizable devices based on customer-specific wavelength and frequency requirements

## ● Part Number

MP-AOM-1550-80M-SM-FA-DP

## ● Application area

BODTR、 DVS、 Optical Switch

## ● Core parameters

Wavelength	Frequency	Connector
1550nm	80MHz	FC/APC



## ● General Parameters

### Parameters

Parameter	unit	Min.	Max.	Typ.	Remark
Material				TeO <sub>2</sub>	
Wavelength	nm	1520	1580	1550	Customizable
Average Optical Power	W		0.5		
Ultrasonic Speed	m/s			4200	
Insertion Loss	dB	1st order light <2; 0th order light <1.5			
Extinction Ratio	dB	1st order light >45; 0th order light >10			
Return Loss	dB	40			
Rise Time	ns	60	70	65	
Frequency	MHz			80	Customizable
RF Power	W		2.5	2.5	
Voltage Standing Wave Ratio (VSWR)				1.2:1	
Input Impedance	Ω			50	
Device Interface				SMA	
Fiber Type		SMF-28e/PM1550			
Fiber Length	m			1	
Fiber Interface				FC/APC	
Operating Temperature	°C			-20~60	
Storage Temperature	°C			-30~70	

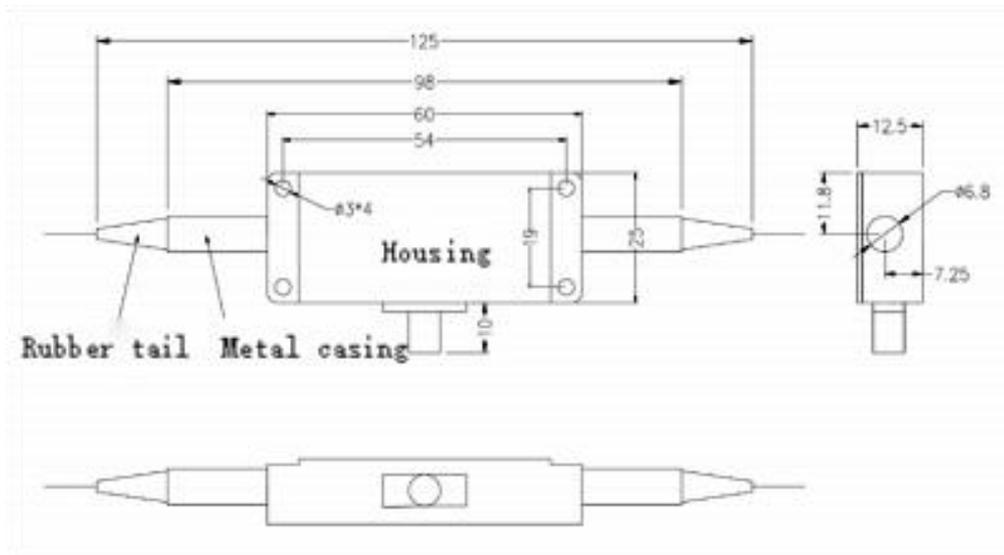
## RF Driver

The product features stable operation, high frequency stability, stable power output, and low power consumption.

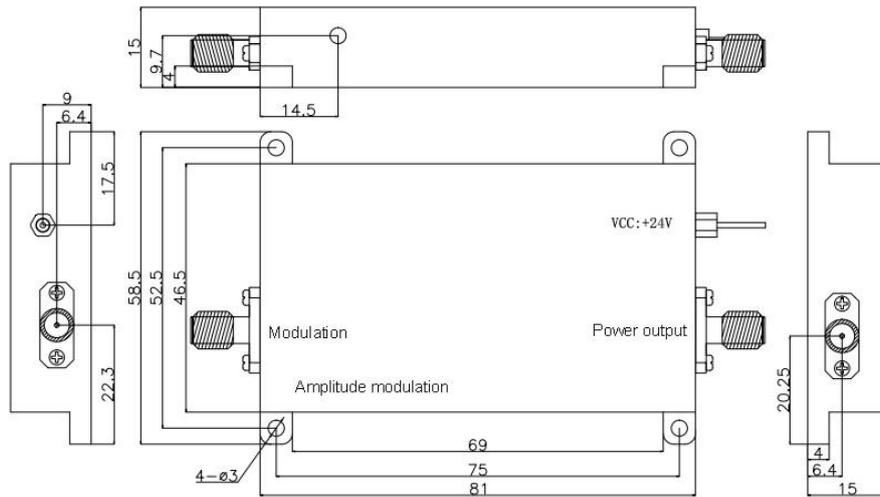
Output Frequency (Mhz)	40、 60、 80、 100、 120、 150、 200
Operating Voltage(V)	24V
Output Power(W)	0.1-3
Impedance matching( $\Omega$ )	50
Control Method	TTL, Sine Wave, Audio
Interface	SMA

## Package Dimensions

### AOM Modulator



## RF Driver



### Ordering info

**MP-AOM-△ Bandwidth-○ Working Wavelength-XX**

**DP: Dual Port AOM**

**△ Bandwidth:**

**40: 40MHz**

**80: 80MHz**

**100: 100MHz**

**150: 150MHz**

**200: 200MHz**

**○ Working Wavelength (780-1600nm):**

**0780: 780nm**

**1064: 1064nm**

**1550: 1550nm**



**XX: Fiber and Connector Type**

**SA = SMF-28E + FC/APC**

**SP = SMF-28E + FC/PC**

**PP = PM Fiber + FC/PC**

**PA = PM Fiber + FC/APC**

**MP-AOM-1550-80M-SM-FA-DP**

**1550nm 80MHz Dual Port Fiber Coupled Acousto-Optic Device**

**Operating Wavelength: 1550nm**

**Rise Time: Less than 70ns**

**Frequency: 80MHz**

**Insertion Loss: 1st Level Light < 2dB, 0th Level Light < 1.5dB**

**Extinction Ratio: 1st Level Light > 45dB, 0th Level Light > 10**

**PM1550 FC/APC**