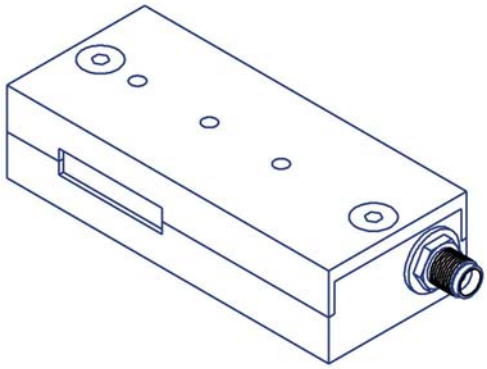
MODEL ACM SERIES ACOUSTO-OPTIC MODULATOR/ FREQUENCY SHIFTER

- NEAR IR WAVELENGTH RANGE
- INTENSITY MODULATION
- OPTICAL FREQUENCY SHIFTING
- OPTICAL ISOLATION
- LOW RF DRIVE POWER
- HIGH RELIABILITY
- HIGH OPTICAL POWER CAPABILITY



SPECIFICATIONS				
Acousto-optic Material	AMTIR-1 Chalcogenide Glass			
Optical Wavelength[1]	1.2 to 1.6 µm			
Optical Power Capability	50 kW / cm^2			
Active Aperture Height[2]	2 mm			
Diffraction Efficiency	90%			
RF Drive Power[3]	600 mW (1.55 µm)			
RF Input Impedance	50 ohms			
Modulation Bandwidth (-3db)	1.25 MHz (1.5 mm diameter)			
Optical Rise Time	255 ns/mm beam diameter			
Static Optical Insertion Loss	5% (1.55 µm)			
Optical Polarization	Any			
RF Connector	SMA			
Size (less connector)	2.80 L x 1.25 W x 0.70 H inches			
	71.2 L x 31.8 W x 17.8 H mm			
MODEL	**ACM-402AA1**	**ACM-502AA1**	**ACM-802AA1**	**ACM-1002AA1**
Center Frequency[4]	40 MHz	50 MHz	80 MHz	100 MHz
Optical Frequency Shift	±30 to 50 MHz	±40 to 60 MHz	±65 to 95 MHz	±80 to 120 MHz
Beam Separation (1.55 µm)	24.6 mrad	30.8 mrad	49.2 mrad	61.5 mrad

[1] Wavelengths available in the range of 1.2 to 2.5 µm with appropriate antireflection coating. Specifications vary with optical wavelength.
[2] Other active aperture heights available with modified specifications.
[3] Fixed frequency, synthesized variable frequency, or OEM drivers are available.
[4] Any RF frequency from 40 to 250 MHz is available. Specifications vary with RF frequency.