IntraAction Corp.
QUALITY PRODUCTS FOR LASER TECHNOLOGY

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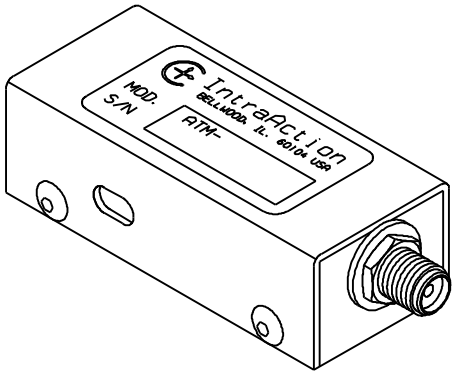
FREQUENCY SHIFTER

MODEL ATM-A1/A2 SERIES
ACOUSTO-OPTIC FREQUENCY SHIFTER

- WIDE CENTER FREQUENCY CHOICE
- USER SPECIFIED CENTER FREQUENCY[1]
- WIDE FREQUENCY SHIFTING RANGE
- HIGH DIFFRACTION EFFICIENCY
- BEAM DEFLECTION
- LOW DRIVE POWER
- HIGH RELIABILITY



SPECIFICATIONS

Range of Center Frequency Choice[1] (F)	80 MHz - 350 MHz
Frequency Shifting Bandwidth	50 percent of center frequency
Acousto-optic Material	Tellurium Dioxide (TeO_2)
Active Aperture Height	1 mm
Sound Velocity (V)	4260 m/sec (longitudinal)
Beam Separation	(? x F) / V
Optical Rise Time	151 nsec/mm beam diameter
Static Optical Insertion Loss	<4 percent
Input Impedance	50 ohms
Input VSWR	<1.5:1 at center frequency
Size (less SMA connector)	2.00 L x 0.63 H x 0.9 W inches 5.08 L x 1.60 H x 2.28 W cm

MODEL	**ATM-A1 Series**	**ATM-A2 Series**
Optical Wavelength Range[2] (?)	440 nm - 700 nm	700 nm - 1100 nm
Diffraction Efficiency[3]	85 percent (80 MHz) 70 percent (350 MHz)	80 percent (80 MHz) 65percent (350 MHz)
RF Drive Power[3,4]	1 watt (633 nm)	1.5 watts (780 nm)
Examples: (90 MHz center frequency) (270 MHz center frequency)	ATM-901A1 ATM-2701A1	ATM-901A2 ATM-2701A2

[1] Choose center frequency to match application.
[2] Specifications vary with optical wavelength.
[3] RF drive power required varies as the square of the optical wavelength.
[4] A complete line of drive electronics is available. See VFE series, ME series, and DE series drivers. OEM drivers also available.