

A-O DEFLECTOR-MODULATOR

- Laser Beam Deflection
- Intensity Modulation
- Flat Optical Scan Response¹
- Optical Frequency Shifting
- Optical Signal Processing
- Multiple Beam Generation
- High Optical Power Capability
- Excellent Temperature Stability & Reliability



Model	ADM-40
Optical Wavelength Range	440 to 700 nm
Acousto-optic Material	Dense Flint Glass
Center RF Frequency	40 MHz
Deflection RF Bandwidth	20 MHz
Optical Frequency Shift Range	30 to 50 MHz
Beam Separation	6.5 mrad (633 nm)
Angular Deflection	3.2 mrad (633 nm)
Diffraction Efficiency	85 percent
Active Optical Aperture	2 x 20 mm
Access Time	252 nsec / mm beam width
Time-Bandwidth Product	100 (full aperture)
Intensity Modulation Bandwidth	2.9 MHz (1.0 mm beam diameter) 4.5 MHz (0.65 mm beam diameter)
Optical Rise Time	162 nsec / mm optical beam width
Optical Polarization	Any
Static Optical Insertion Loss	2 percent (633 nm)
RF Drive Power	2 watts (nominal at 633 nm)
RF Impedance	50 ohms (nominal)
RF Connector	BNC
Size (less connector)	2.94 D x 0.88 H x 2.46 W inches 74.6 D x 22.4 H x 62.5 W mm

¹ The Model ADM-40 incorporates an acoustic phased-array beam steering design which produces a relatively flat first order diffraction efficiency across the deflection bandwidth.