



Polytec GmbH

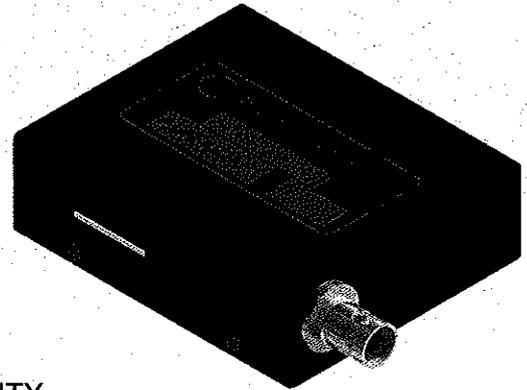
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**MODEL ADM-402AF1
ACOUSTO-OPTIC DEFLECTOR-MODULATOR**

- LASER BEAM DEFLECTION
- INTENSITY MODULATION
- FLAT OPTICAL SCAN RESPONSE¹
- OPTICAL FREQUENCY SHIFTING
- OPTICAL SIGNAL PROCESSING
- MULTIPLE BEAM GENERATION
- HIGH OPTICAL POWER CAPABILITY
- EXCELLENT TEMP. STABILITY & RELIABILITY



SPECIFICATIONS

Optical Wavelength Range ²	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 ³	7.0 mrad (633 nm)
Angular Deflection ³	3.5 mrad (633 nm)
Diffraction Efficiency	85 percent
Active Optical Aperture	2 x 20 mm
Access Time	276 nsec / mm beam width
Time-Bandwidth Product	5.5 / mm beam width
Intensity Modulation Bandwidth	2.7 MHz (1.0 mm beam diameter)
Optical Rise Time	177 nsec / mm optical beam width
Optical Polarization	Any
Static Optical Insertion Loss	2 percent (633 nm)
RF Drive Power ³	2 watts (nominal at 633 nm)
RF Impedance	50 ohms (nominal)
RF Connector	BNC
Size (less connector)	0.88 H x 2.94 D x 2.46 W (inches) 22.4 H x 74.7 D x 62.5 W (mm)

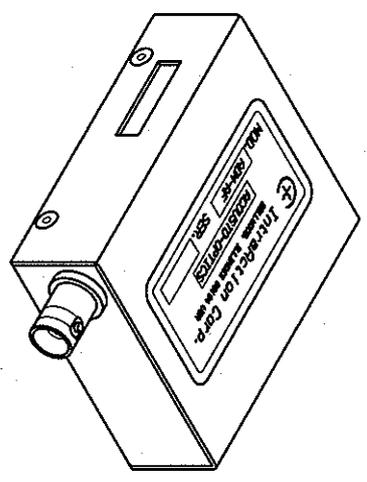
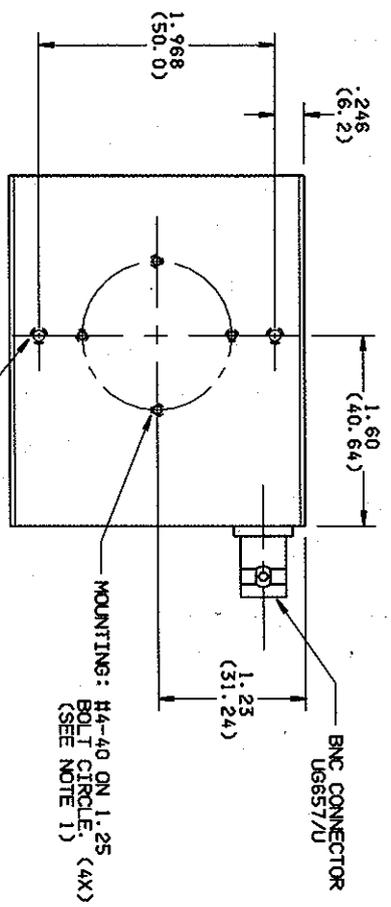
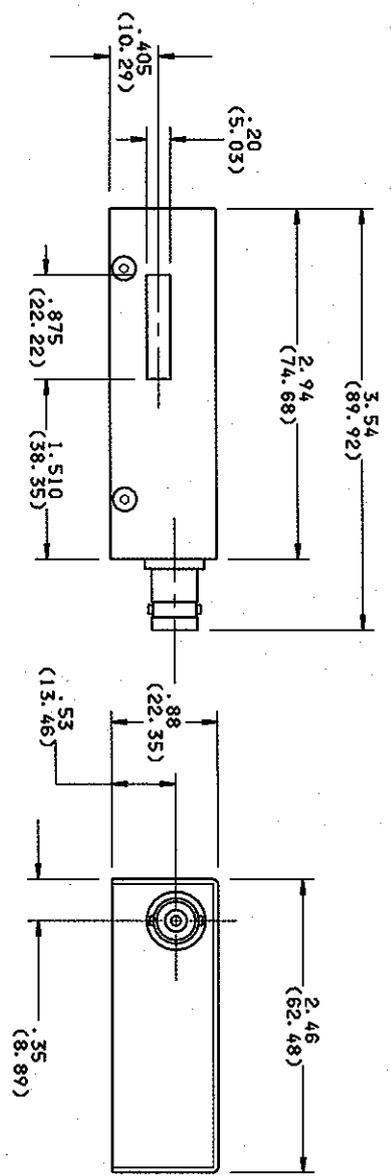
¹ The Model ADM-40 incorporates an acoustic phased-array beam steering design which produces a relatively flat first order diffraction efficiency across the deflection bandwidth.

² Other optical wavelengths and wavelength ranges are available.

³ Operating specifications change with optical wavelength and/or RF frequency.

ENG2108

REVISIONS		
ISSUE	DESCRIPTION	APPD/DATE
ORIGIINAL	GJK 08-12-03	
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NOTES:
 1. MOUNTING SCREEN DEPTH MUST NOT EXCEED 0.20 INCHES
 (5.08 mm) MAX.

MOUNTING: M3.5 X .6 (2X)
 (SEE NOTE 1)

MOUNTING: #4-40 ON 1.25
 BOLT CIRCLE. (4X)
 (SEE NOTE 1)

BNC CONNECTOR
 UG851/U

UNLESS OTHERWISE SPECIFIED TOLERANCES AND DIMENSIONS ARE IN INCHES		APPROVED	DATE
LINER : .XX ±.010		CHECKED	DATE
ANGULAR ± / DIAMETERS ± / LIMITS APPLY BEFORE FINISHING DO NOT SCALE THIS PRINT		DRAWN	DATE
MATERIAL		GJK	08-12-03
FINISH			
HFG. INSTR.			
D.C. INSTR.			
FSCM NO.		TITLE	
B ADM-AF SERIES		Interaction Corp. 3719 WARREN AVE. BELLWOOD, IL 60104	
DMG. NO.		PHONE (708) 547-6644	
ADM-AF SERIES		ADM-AF SERIES OUTLINE	
SCALE	UNIT WEIGHT	SHEET	1 OF 1