

# D1319-XY-T220L-2

## Acousto-Optic Deflector



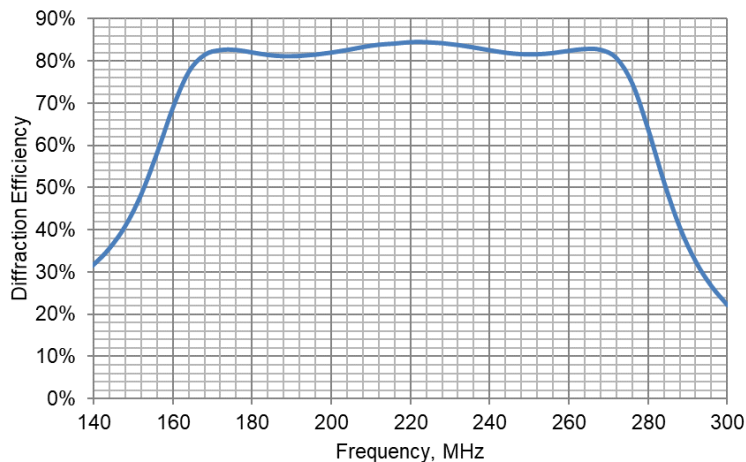
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The D1319-XY is an AO deflector designed for operation in the deep blue spectrum. The deflector incorporates two section acoustic beam steering to produce an efficient uniform scan response. Applications include high speed, multi-point or continuous beam scanning.

### SPECIFICATIONS

Operating A/R Wavelengths:	390-440 nm
Optical Power:	5 Watts **
Interaction Medium:	Tellurium Dioxide (TeO <sub>2</sub> )
Acoustic Velocity:	4.2mm/μs
Centre Frequency (Fc):	220MHz (+/- 10% for best BW)
RF Bandwidth (BW):	>85MHz, 100MHz typical
Input Impedance / VSWR:	50Ω Nominal / <1.7:1 @ Fc
RF Power:	< 1.5 Watts total per axis.
Clear Aperture:	3mm
Active Aperture Height:	2mm
Static Insertion Loss / Reflectivity:	<3% / <0.5%/surface at 0.4um
Laser Polarization:	Any
	<b>399nm    405nm    411nm</b>
Bragg Angle (mrad):	10.45    10.6    10.8
Separation Angle at Fc	20.9    21.2    5.4
Scan Angle, 85MHz sweep (mrad):	8.1    8.2    8.3
<u>Deflector Performance:</u>	Using 2 x 2mm beam
Total XY Efficiency	~55% across 85MHz scan
Access Time:	0.47μsec
Resolution:	40 x 40 <u>resolvable</u> spots
	>1000 x 1000 non-resolvable points

**Estimated Scan Efficiency at 405nm PER AXIS \***

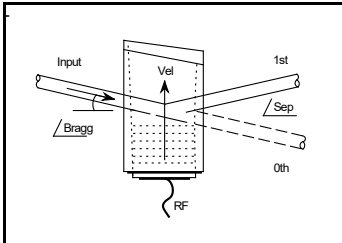


\* Single mode input

\*\* For higher powers please contact Isomet

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
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**Quality Assured.**  
**In-house: Crystal Growth,**  
**Optical Polishing,**  
**A/R coating, Vacuum Bonding**



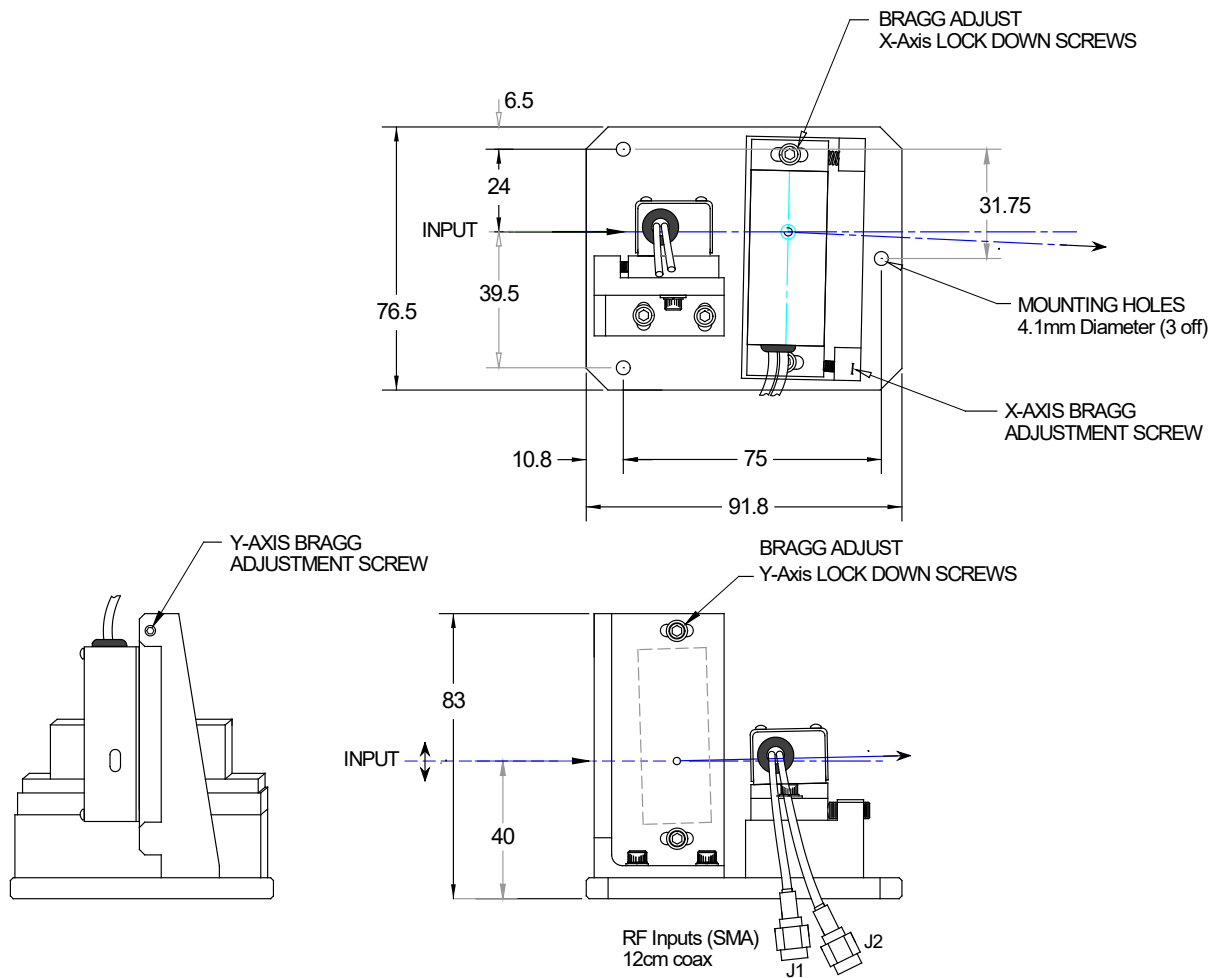
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### OUTLINE DRAWING



### RF DRIVERS

Isomet Synthesizer: iMS2-HF + (2x) BSM1319-220 splitter/delay module + (4x) AF0-200T-1-1 amplifiers.

External freq' source: (2x) BSM1319-220 splitter/delay module + (4x) AF0-200T-1-1 amplifiers.

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