

# OAD-1121XY

## Dual Axis AO Deflector

Off-Axis



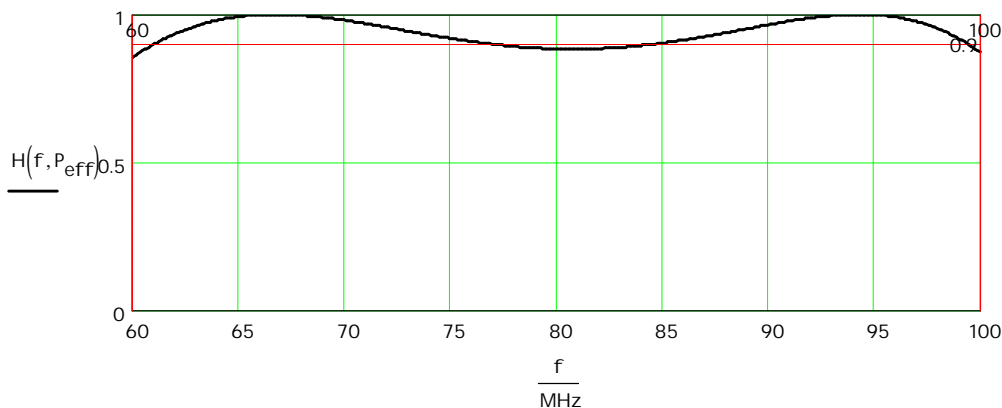
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The OAD-1121XY offers high throughput efficiency over a wide scan angle at 810nm. This deflector has been designed for simplicity and consists of two AO deflector crystals mounted orthogonally in one case. There is no requirement for input or intervening optics between the crystals.

### PRELIMINARY SPECIFICATIONS

|                                       |  |
|---------------------------------------|--|
| Operating Wavelength:                 | 810nm  |
| Interaction Material:                 | TeO <sub>2</sub> (off-axis)                  |
| Acoustic Wave:                        | Shear  |
| Acoustic Velocity:                    | 690M/s                                       |
| Center Frequency (f <sub>c</sub> ):   | 80MHz  |
| RF Bandwidth:                         | 40MHz  |
| Scan Angle/Axis (degrees):            | 2.7°   |
| Input Polarization (Required):        | Linear, horizontal w.r.t. base               |
| Output polarization:                  | Linear, horizontal w.r.t. base               |
| Active Aperture:                      | 9mm x 9mm                                    |
| f <sub>c</sub> Separation Angle/Axis: | 5.4°   |
| Max RF Power:                         | 1.5W/axis (nominal)                          |
| Input impedance:                      | 50 ohm                                       |
| Access Time:                          | 13usec                                       |
| Resolution:                           | >500 x 500                                   |
| Throughput efficiency across scan     | 65% / axis (nominal)<br>>40% total (nominal) |

### Relative Diffraction Response vs Frequency (per axis)



#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

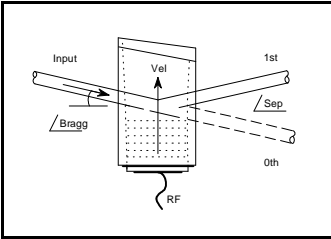
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

#### Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding



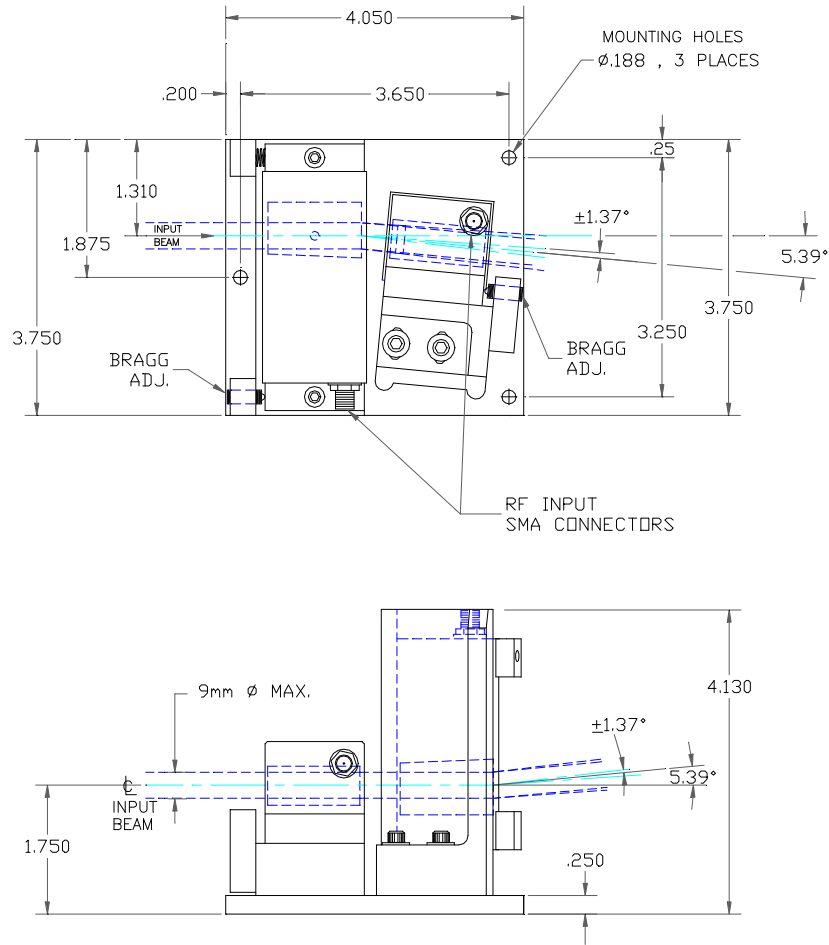
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### OUTLINE DRAWING



### Recommended Drive Electronics

2 SETS OF:

iDDS-1-U Frequency Synthesizer and 503C-2 Amplifier  
or  
620C/630C-80 Variable Frequency Driver

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