

# OAD1550-XY



## Dual Axis AO Deflector- Preliminary

Off-Axis

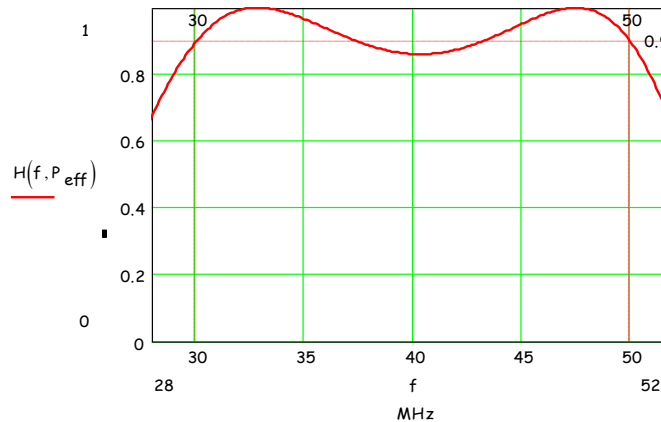
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The OAD1550-XY offers high throughput efficiency over a wide scan angle in the NIR range. This deflector has been designed for simplicity and consists of two AO deflector crystals mounted orthogonally in one case. There is no requirement for input or intervening optics between the crystals.

### SPECIFICATIONS

Operating Wavelength:	1.55um
Interaction Material:	TeO <sub>2</sub> (off-axis)
Acoustic Wave:	Shear
Acoustic Velocity:	689m/s
Center Frequency (f <sub>c</sub> ):	40MHz (+/- 10% for best scan)
RF Bandwidth:	20MHz
Scan Angle/Axis:	2.3°
Input Polarization (Required):	Linear, horizontal w.r.t. base
Output polarization:	Linear, horizontal w.r.t. base
Active Aperture:	7mm x 7mm
f <sub>c</sub> Separation Angle/Axis:	5.2°
Max RF Power:	2.7W/axis (nominal)
Input impedance:	50 ohm
Access Time:	10usec
Resolution:	>200 x 200
Efficiency across scan	80% (typ'), > 60% per axis
Throughput efficiency	> 30% total

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



**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

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

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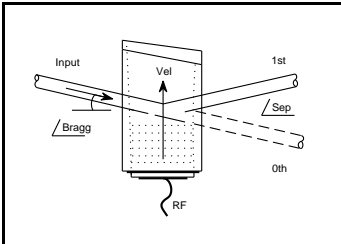
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

**In-house: Crystal Growth,**

**Optical Polishing,**

**A/R coating, Vacuum Bonding**



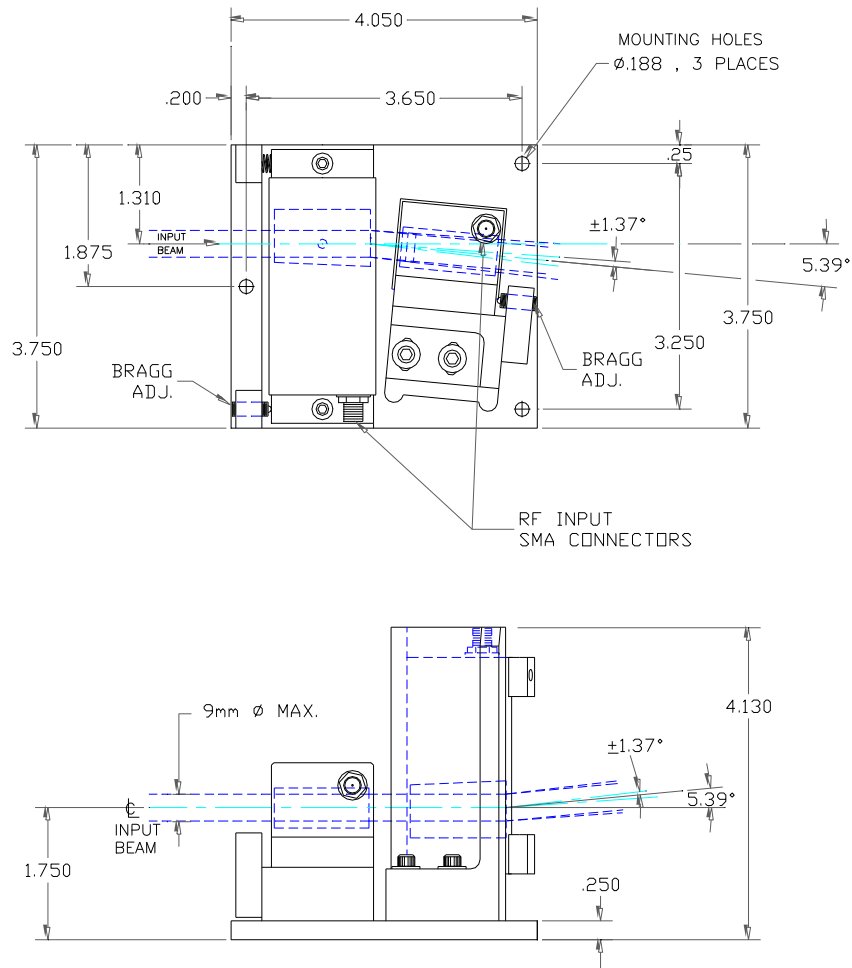
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### OUTLINE DRAWING



**DIAGRAM for reference only. ANGLES not correct**

#### Recommended Drive Electronics

iHSA-4 multi-output Frequency Synthesizer  
or  
2 x 620C/630C-40 Variable Frequency Driver

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