

OAD1550-XY



Dual Axis AO Deflector- Preliminary

Off-Axis

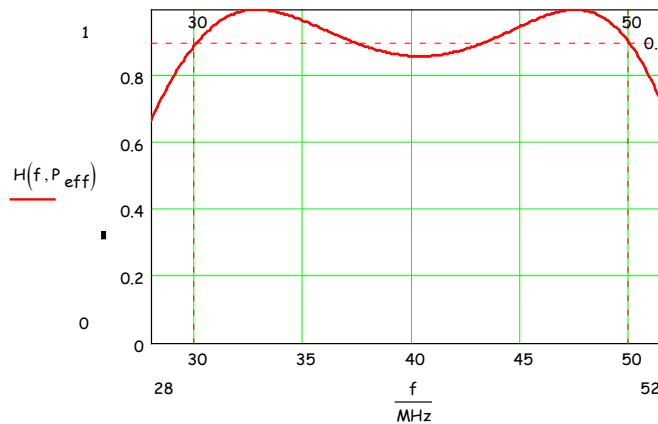
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The OAD1550-XY offers high throughput efficiency over a wide scan angle in the NIR range. This deflector has been designed for simplicity and consists of two AO deflector crystals mounted orthogonally in one case. There is no requirement for input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

SPECIFICATIONS

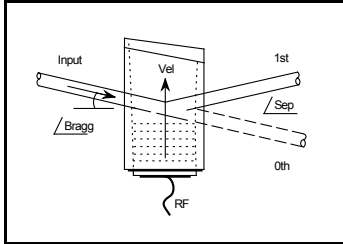
Operating Wavelength:	1.55um
Interaction Material:	TeO ₂ (off-axis)
Acoustic Wave:	Shear
Acoustic Velocity:	689m/s
Center Frequency (f _c):	40MHz (+/- 10% for best scan)
RF Bandwidth:	20MHz
Scan Angle/Axis:	2.3°
Input Polarization (Required):	Linear, horizontal w.r.t. base
Output polarization:	Linear, horizontal w.r.t. base
Active Aperture:	7mm x 7mm
f _c 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)



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Quality Assured.
 In-house: Crystal Growth,
 Optical Polishing,
 A/R coating, Vacuum Bonding



OAD150-XY



Dual Axis AO Deflector- Preliminary Off-Axis

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OUTLINE DRAWING

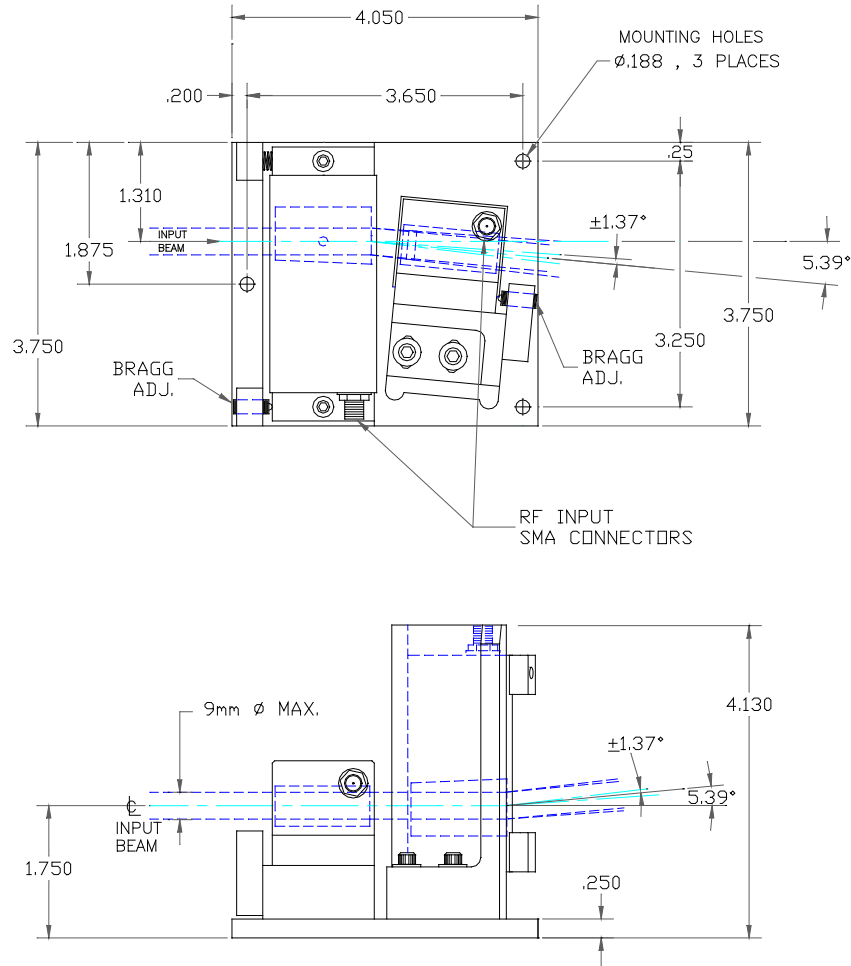


Diagram for reference only. Beam ANGLES not correct

Recommended Drive Electronics

ims4-L (or -P) synthesizer plus 801C-1 amplifier
2 x 620C/630C-40 Variable Frequency Driver

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