

Acousto-Optic Deflectors

AO deflectors are specialized designs for high speed scanning applications. Scanning occurs by varying the carrier RF frequency over the specified bandwidth. We have various designs covering wavelengths in the UV up to Telecom wavelengths in the near IR. Below are representative samples of the many designs we offer.

Applications	
■	Inspection Systems
■	Graphic Printing
■	Telecom
■	Micro Machining

Model #	λ (nm)	Center Freq. (MHz)	Mode	Material	Freq. (MHz)	Velocity mm/ μ s	Time BW	Active Acoustic Aperture (h x l) (mm)	Diff. Eff. (%)	Scan Angle (mrad)	RF Power (Watts)
4200-UV	266	200	Longitudinal	Fused Silica	135-265	5.960	2300	1.0 x 60.0	40	10.3	3.0
4100-UV	364	100	Slow Shear	TeO2	75-125	0.617	1100	4.0 x 14.0	75	29.5	1.0
4200-VI	442	200	Off Axis Shear	TeO2	150-250	0.710	675	4.8 x 4.8	75	27.7	1.0
4100-VI	488	100	Slow Shear	TeO2	75-125	0.617	1100	4.0 x 14.0	80	39.5	1.2
4300-VI	488	300	Longitudinal	TeO2	200-400	4.200	1200	0.4 x 25.3	40	23.2	2.2
4080-VI	488-633	80	Off Axis Shear	TeO2	55-105	0.656	1000	2.0 x 15.0	80	37.2	1.0
4080-VR	635	80	Slow Shear	TeO2	76-84	0.617	25	2.0 x 2.0	50	8.2	0.3
4170-IR	660	172.5	Off Axis Shear	TeO2	115-130	0.780	800	2.0 x 6.0	50	88.8	2.2
4055-IR	780-830	52.5	Off Axis Shear	TeO2	35-70	0.656	630	2.0 x 12.0	80	44.3	1.5
4210-IR	830	210	Longitudinal	TeO2	140-280	4.200	200	2.0 x 6.0	35	27.6	3.0
4075-IR	1066-1100	75	Longitudinal	TeO2	59-91	4.200	19	2.5 x 2.5	70	8.1	4.0



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