Electro-Optic Devices

Features

- · Quadrapole electric field in an electro-optic material
- Large aperture diameters
- · Operation in the UV and IR
- Higher output voltage drivers with special waveforms
- The construction of a beam pointing stabilizer
- X-Y systems by coupling two deflectors with an intermediate polarization rotator



Deflector Specifications

Model Number	M310A	M311A	M312	M312-2
Deflection Efficiency micro-radians/volt	1.5	3	0.6	1.2
Usable Aperture (mm)	2.5	2.5	2.7	2.7
Capacitance (pf)*	100	185	50	100
Spectral Range**	400-750	400-750	400-1100	400-1100
Length,"L"(mm)	4.65 (118)	8.62 (219)	2.77 (71)	4.9 (125)

^{*} Available as 2 Port version : 50 and $100 \, \Omega$

Deflection Systems Specifications

Model 308 (High voltage digital driver) + Model 302 (with model 312-5 five crystal deflector) Digital

Deflection	±1.5 milliradians (symmetric)			
Rise/Fall Times	<60ns			
Maximum pulse width	<100µs			
cable length driver/deflector	<40cm			
Rep rate	<1KHz			
Droop	<< 5%			
Amplitude control	Internal 0 to 1KV			
Analog				
Deflection	±0.3 milliradians			
Bandwidth	DC to 250KHz			
DC centering	< ±90microradians			
Driver	Model 302			

Model 317 (Dual deflection system, 311A deflector and 2 drivers)

Driver Specifications Model M2100 Driver

Connected to 3 Crystal Port	0 to ± 0.5 mrad
Access Time	<35 ns
Bandwidth	<10kH to 12MHz
Input	<0 dbm (626mV p-p) signal must have net
mpat	DC=zero waveform (50% duty cycle)
Dimensions	122 x 38.1 x 49.9 cm
Maximum pulse width (2% droop)	200ns
Static DC bias range	0 to 550V
Electrical input power	1.6KW

Model 301 (311A deflector & a dual driver) Digital deflection (3 Crystals)

Input	TTL		
Rep rate	40KHz Max.		
Deflection angle	>±0.5 mrad		
Access time	80ns		
Analog deflection (1 Crystals)			
Input	±2V, p-p/1K		
Deflection frequency	DC-150KHz		
Deflection angle	>±0.3 mrad		
Cable Length			
Deflector/Driver	60cm		
Driver/ Control cabinet	3M		

Model 302 Driver

Connected to single crystal port	0 to ± 0.3 mrad (DC to 200KHz)	
Access time	<1µs	
Input requirement	<2V p-p	
Input impedance	<50 Ω	
Output voltage	750V p-p	
Bandwidth (-3db)	200KHz	
Driver cabinet	6.5" (W) x 4.125" (L) x 4.15" (H)	
Power supply cabinet	19" Rack x 5.25" (H)	

^{**} UV and DUV options available