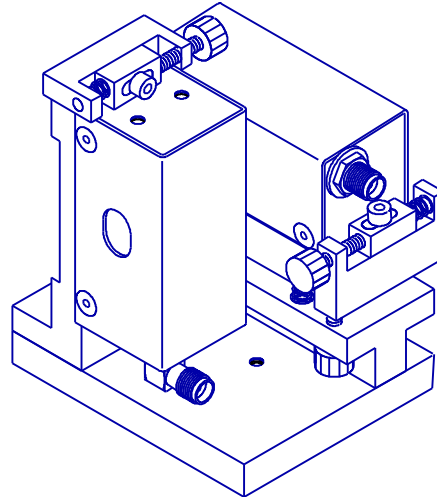




**MODEL DTD-274HA6  
2-AXIS ACOUSTO-OPTIC DEFLECTION SYSTEM**

- LASER BEAM DEFLECTION
- OPTICAL TWEEZERS
- LASER BEAM SCANNING
- LOW DRIVE POWER
- RELIABLE OPERATION



**SPECIFICATIONS**

Acousto-optic Material	Tellurium Dioxide (TeO <sub>2</sub> )
Operating Mode	Slow shear / off axis
Optical wavelength	1064 nm
Active Aperture	4 x 4 mm
Center Frequency	27 MHz
Deflection Bandwidth	16 MHz
Beam Separation	45 mrad (27 MHz)
Deflection Range	26.9 mrad (16 MHz bandwidth)
Diffraction Efficiency	50 percent
Optical Intensity Variation	<1 dB
Access Time	1.6 μsec / mm beam diameter
Time-Bandwidth Product	100 (4 mm beam diameter)
Optical Input and Output Polarization	Linear, perpendicular to assembly base
RF Drive Power <sup>1</sup>	1 Watt per axis (nominal)
Input Impedance	50 ohms (nominal)
RF Connectors	SMA
Size	2.73 D x 3.18 H x 2.42 W inches 6.93 D x 8.08 H x 6.15 W cm

<sup>1</sup> DVE series Dual Frequency Source (PCI computer board) & DPA series Dual RF power Amplifier are available for optical tweezers applications. Voltage Controlled Oscillator, deflector drivers are also available.