IntraAction Corp.
QUALITY PRODUCTS FOR LASER TECHNOLOGY

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New Product
2-Axis Deflection System

❑ Optical Tweezers Applications
❑ 2-Axis Deflection

1) DTD-274HA6 2-AXIS DEFLECTOR
Specifications for each axis:
Material: Tellurium Dioxide (4 degree slow shear mode)
A/R Coating, 1053/1064 nm
Active Aperture, 4 x 4 mm
Center Frequency, 27 MHz (1064 nm)
Deflection Bandwidth, 16 MHz
Time Bandwidth Product, 100 (4 mm beam diameter)
Access Time, 1.6 µsec/mm beam diameter
Beam Separation, 45 mrad (1064 nm, 27 MHz)
Total Deflection Angle, 26.9 mrad (1064 nm, 16 MHz BW)
Diffraction Efficiency, 75 percent at center/70 percent on edges
RF Drive Power, 1 watt (1064 nm)
Input Impedance, 50 ohms (nominal)
Optical Polarization, linear
Connector, SMA

2) DVE-4010C9 TWO CHANNEL VARIABLE FREQUENCY SOURCE
Hardware Platform, Intel Pentium or compatible
Computer Interface, PCI bus
Format, standard 1/2 size computer card
Drivers Supplied, Windows 95 / Windows NT
Specifications for each channel:
Type, Direct Digital Synthesizer
Frequency Range, 1 - 50 MHz
Frequency Resolution, 0.029 Hz
Frequency Calibration Accuracy, +/- 1 ppm
Frequency Stability, +/- 1 ppm (0 - 50^{o}C)
Frequency Acquisition Time[1], 1 microsecond
Spurious Levels, -50 dBc (typical)
Harmonic Distortion, -30 dBc
RF Output Capability, +10 dBm
Amplitude Adjustment, 16 bits
Output Impedance, 50 ohms
RF Output Connector, BNC

[1] This is the intrinsic frequency acquisition time for the DVE-4010C9 Frequency source.

3) DPA-502 DUAL RF POWER AMPLIFIER
Number of Channels, 2
RF Output Power Capability, 2 watts / channel