Mesa Photonics Optical Delay Line Specifications

Specification Values

Step Resolution 150 nm (nominal, 1 fs, double pass)

Number of positions65536Range of motion10 mmPosition nonlinearity<0.5%</td>Short term repeatability200 nm

Long term repeatability 50 ppm/degree C

Control loop bandwidth 1 kHz
Hysteresis None
Deadband None

Digital write speed (max) 300 points/second Analog modulation for 90% full scale 20 Hz sine wave

(minimum)

Analog Modulation 3 mm travel 90 Hz sine wave

Yaw Corrected with hollow roof prism (standard,

included)

Pitch 100 μrad/mm max, typical 80 μrad/mm

corrected with optional hollow retroreflector

Control Digital, Analog, or Digital and Analog

simultaneously.

Digital and Analog I/O

2 16-bit A/Ds (SINAD #1, 80 dB, #2 70 dB) 300 samples/second, 1-1000X gain, software

controlled

Analog position control +/- 2V full range
Analog position output +/- 2V full range
Trigger TTL in, active high

Frame synch output CMOS/ TTL out, active high

Included Software: LabView VI's (version 2012), and application for digital scanning and data

acquisition

Size: 5.1" W x 6.1" D x 7.5" H (130 mm W X 154 mm D X 191 mm H).