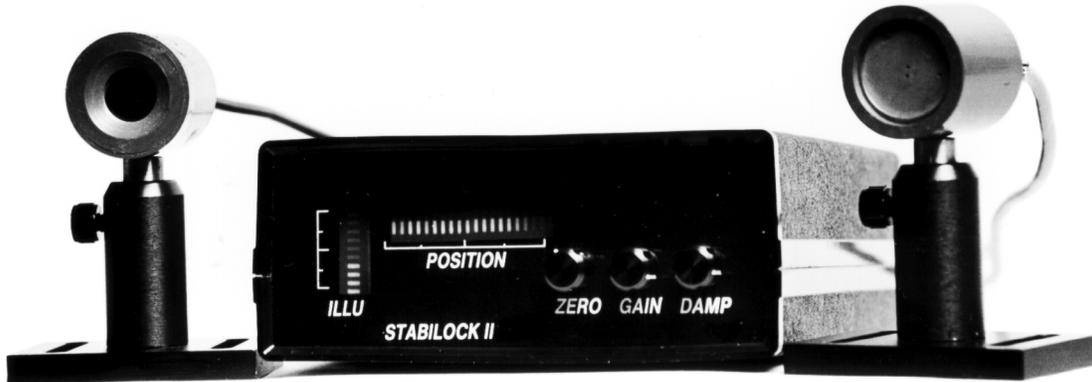


Stabilock II® Fringe Locker

Drift and vibration compensation for holographic exposures



- ◆ Stabilizes long term drift
- ◆ Typical stability of $\lambda/20$
- ◆ 100:1 dynamic range
- ◆ Displays signal/mirror position
- ◆ Adjustable mirror position, signal gain and damping

"Without the Stabilock II®, we could not make most of the holograms we make. We depend on it".

Rich Rallison, CEO Ralicon, Paradise, Utah

"We don't shoot exposures without our Stabilock II® s'. They are integral to our set ups."

Steve Smith, MIT Media Lab, Cambridge, MA
(former president of LaserSmith, Chicago, Ill.)

Applications:

Holography:

- ◆ Transmission and reflection copies
- ◆ Holographic Optical Elements (HOEs)
- ◆ Never-fail classroom holograms
- ◆ Mastering in photo-resist
- ◆ Air current compensation
- ◆ Thermal drift compensation

Interferometry:

- ◆ Real time vibration monitoring
- ◆ Lock fringes for data collection
- ◆ LUPI (laser unequal path interferometer) fringe locking

Lasers:

- ◆ Lock two lasers together to get a single mutually coherent beam
- ◆ Laser frequency drift compensation: lock the laser frequency by locking the fringes caused by frequency drift in the laser cavity

Now you can get the **high contrast holograms** you need even with long exposure times. By eliminating drift, you can get the most out of your material and processes for higher **clarity and efficiency**. If you work with interference patterns, **this is one piece of adaptive optics you should not be without.**



Data Optics, Inc.

115 Holmes Road, Ypsilanti MI 48198-3020

(800) 321-9026 (734) 483-8228 Fax: (734) 483-9879

www.dataoptics.com 7/19/12

E-mail: sales@dataoptics.com

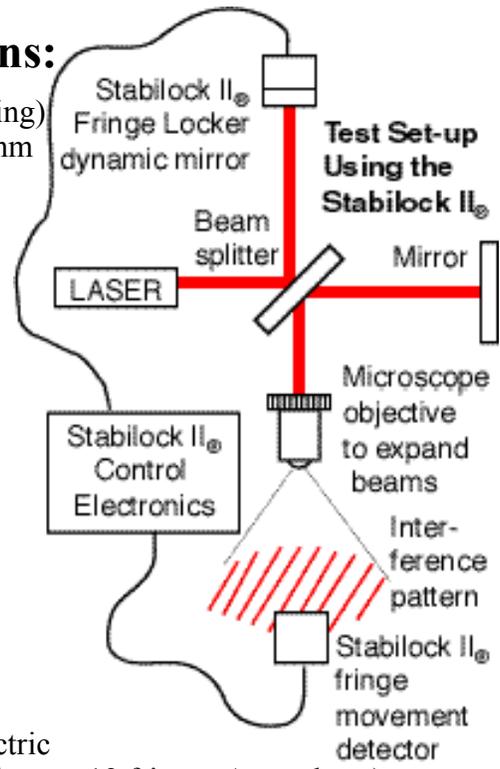
Stabilock II® Fringe Locker Specifications:

Sensor: (1/4-20 threaded mount hole; 1.5" dia. x 1.5" deep housing)
 Spectral sensitivity: 350nm (UV option: 200nm)-1100nm
 Type: Si photodiode
 Spacing: 0.100"
 Peak sensitivity: 800 nm
 System sensitivity: 1 microwatt/cm²

Electronics: (housing: 6.125" L x 10.25" W x 2.5" H)
 Frequency response: 0.5 KHz
 Rolloff (adjustable): 10 - 500 Hz
 Gain (adjustable): 1 - 100X adjustable
 Displays: Red LED bar graphs
 Power (selectable): 120VAC, 0.5 A, or 240VAC
 Monitor output: ±3.8VDC VDC proportional to mirror movement

Mirror: (1/4-20 thrd. mounting hole in a 1.5" x 1.5" housing)
 System stability: λ/20 (typical)
 Driver: Safe low voltage piezo-electric
 Displacement: ±5 μm (±15 fringes HeNe laser, ±18 fringes Argon laser)
 Standard mirror: Coating: aluminum (90% R over visible band)
 Size: 15 mm diameter
 Figure: λ/4

Dielectric mirror option: Coating: High R dielectric (99% R_s, R_p 488-694 nm 0-45°)
 Size: 12.7 mm diameter
 Figure: λ/10
 Durability: MIL-M-13508 (extremely durable)
 Safe energy level: 1KW/cm² CW; 10mJ/cm² 10ns pulse



PRICING AND DELIVERY

<u>Part #</u>	<u>Item</u>	<u>Price (US\$)</u>
SL2	Stabilock II® (with standard mirror: 300 - >900 nm; 92%R)	\$1995.00 US\$
-DM	Stabilock II® with dielectric (488nm-694 nm; 99% R):	\$2345.00 US\$
-UV	Stabilock II® with UV detector/mirror (300-550 nm; 99% R)	\$3190.00 US\$
-VP	Base/post holder/post pair option (as shown in picture) add:	\$158.00
-CI	RS-232computer interface	(available soon)
	Shipping weight/delivery	7 lbs. (15.4 Kg)/<15 days



Accepted



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