EDA400 Sensor-Driver System for FSM & Differential Sensing Applications

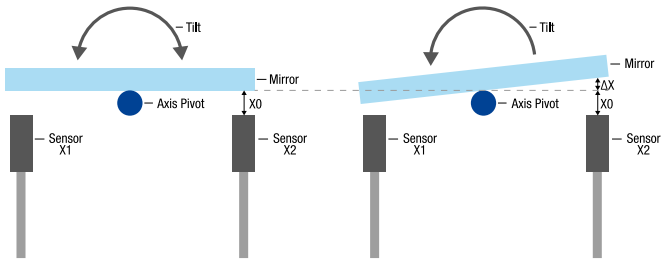
Featuring state-of-the-art Lion Precision Eddy Current Sensors, the new EDA400 controller is the ideal off-the-shelf solution for Fast Steering Mirror and differential sensing applications. The EDA400 system comes with two matched pairs of high-resolution noncontact Eddy Current Sensors, the driver with four sensor inputs (two per axis), an analog output, and a nine-pin connector interface for easy connectivity.

DESIGNED FOR

- Fast Steering Mirrors (FSM)
- Telescope and microscope stabilization
- Image stabilization

HOW IT WORKS

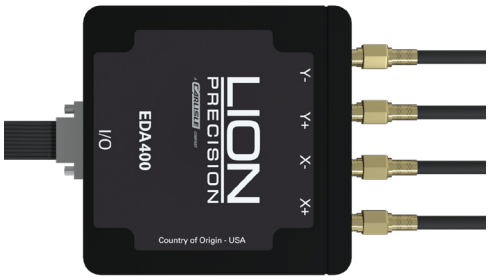
The differential system provides feedback from any change in the null position. Small changes in the tilt of the target are measured and sent to the actuator to allow fast and accurate control and positioning.

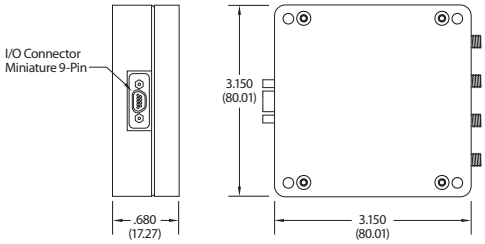


FEATURES

- High bandwith
- High resolution
- Low power consumption
- Excellent temperature stability
- Matched sensor for high stability and repeatability
- Radiation tolerant

The system can be customized for specific applications and is also available as a board without an enclosure for space savings and easy integration into a control system.





SPECIFICATIONS

Input Voltage	±15 VDC
Power	1.0 watts
Output	± 5 VDC SE, opt. ±10 VDC diff.
Linearity Error	±0.3% F.S.
Operating Temperature	-25 °C to 55 °C
Probe Operating Environment	-25 °C to 55 °C
Weight (Electronics)	35 grams (board only) 157 grams (with enclosure)
Weight per Probe (1 meter)	13.4 grams
Null Gap*	0.5 mm
Measuring Range*	±0.35 mm
Thermal Sensitivity at Null	0.01% F. S./ °C
Frequency Response	18 kHz

**Standard range shown; custom ranges available upon request.*

LION PRECISION A CARLISLE BRAND

Learn more at:
LionPrecision.com/products/eda400/

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