



## TECHNOLOGY

# Fiber Optic Strain Sensor

## OVERVIEW

A fiber optic sensor flatpack capable of extremely sensitive strain measurements, without the complexity, high installation costs and sensitivity to extraneous effects associated with conventional strain gage technologies, such as resistance foil strain gages. The "flatpack" strain sensor houses two individual sensors to allow for accurate temperature compensated strain measurements. The packaging method incorporates plastic materials and laminate manufacturing techniques, which results in a fully hermetic package that is resistant to harsh environmental conditions. Multiple flatpacks can be connected in series and interrogated along a single optical fiber cable when the flatpacks are constructed with fiber optic sensors that can be serially multiplexed, such as with Bragg grating sensors.

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## Additional Information

### INSTITUTION

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### PATENT STATUS

Issued

### LICENSE STATUS

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### CATEGORIES

- Microelectronics

### EXTERNAL RESOURCES

- [US Patent 6,668,105](#)

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