

[OESEN-STR-100, 200, 300, 400, 500, 600]

## Fibre Bragg Grating Strain Sensors

### Applications:

- Bridges and highway
- Big buildings
- Dams
- Petroleum plants and pipelines
- Oil fields
- Electrical transformers
- Aerospace industry
- Biomedical
- Environment

### Product description:

A new, low cost fibre grating strain sensor is now available at **O/E LAND INC.** Based on our new design, this new fibre grating strain sensor can be widely used in construction, bridge, aerospace, electrical, petrochemical, biomedical, nuclear and other industry applications.

The fiber cable can be packaged with armoured cable (or other type of cables) to protect from damage in harsh environments, like rust, shock, corrosion, vibration, and sharp mechanical objects. **OESEN-STR-100, 200, 300, 400, 500, 600** can also be used with welding base to have a long term life time.

### Surface Mount Strain Sensor with Model number: OESEN-STR-100

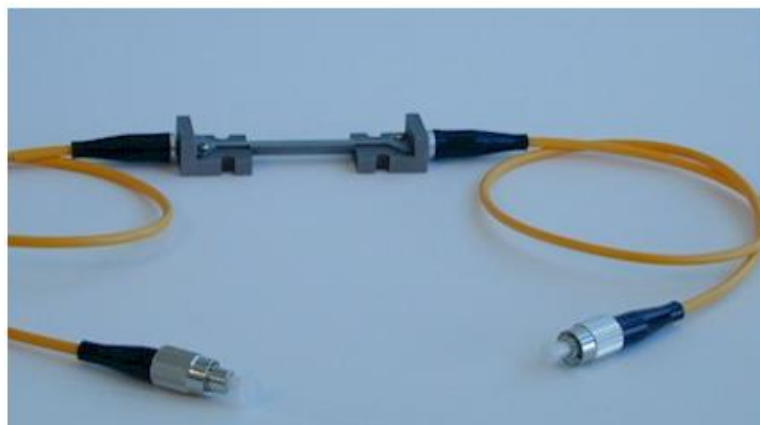


Figure 1: Fiber Bragg Grating Strain Sensor for Surface Mount

### Specifications of OESEN-STR-100:

Parameter	Unit	Value
Range	$\mu\text{Strain}$	$\pm 1000$
Resolution	$\mu\text{Strain}$	1
Working Temperature	$^{\circ}\text{C}$	-50 - +80
Size (Length x width x height)	mm	70 x 18 x 11

### Small Form Surface Mount Strain Sensor with Model number: OESEN-STR-200

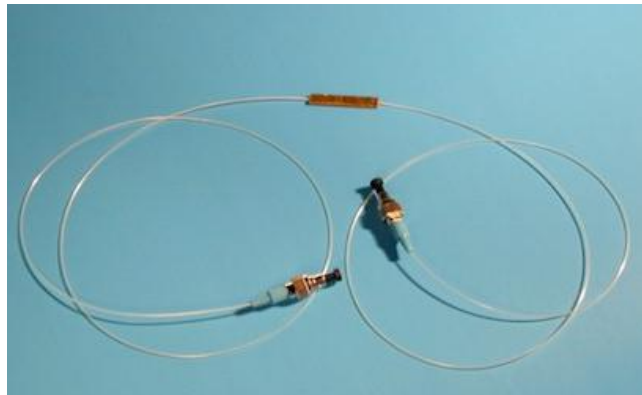
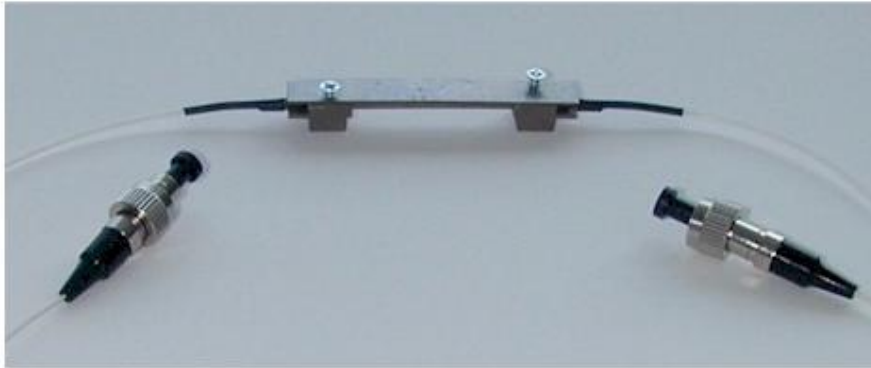


Figure 2: FBG Strain Sensor with small form surface mount

### Specifications of OESEN-STR-200:

Parameter	Unit	Value
Range	$\mu\text{Strain}$	$\pm 1000$ (larger strain range available)
Resolution	$\mu\text{Strain}$	1
Working Temperature	$^{\circ}\text{C}$	-50 - +80
Size (Length x width x height)	mm	6 x 40 x 4

High profile Surface Mount Strain Sensor with Model number OESEN-STR-300:



**Figure 3: FBG Strain Sensor with high profile surface moun**

Specifications of OESEN-STR-300:

Parameter	Unit	Value
Range	$\mu\text{Strain}$	$\pm 1000$ (larger strain range available)
Resolution	$\mu\text{Strain}$	1
Working Temperature	$^{\circ}\text{C}$	-50 - +80
Size (Length x width x height)	mm	8 x 54 x 7

Embedded Mount Strain Sensor with Model number: OESEN-STR-400:

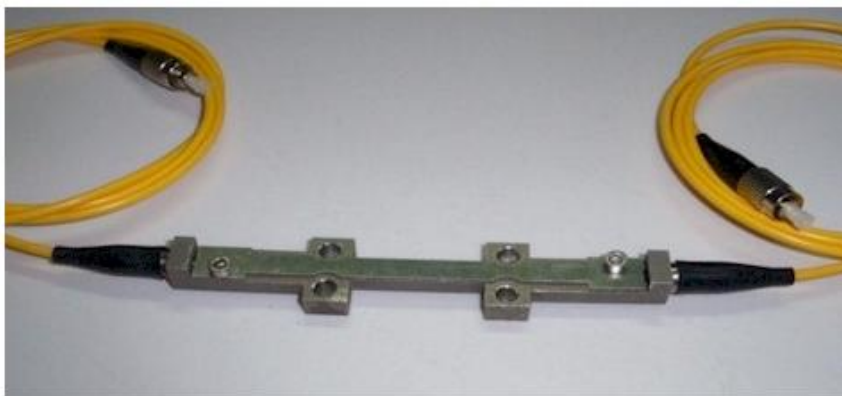


**Figure 4: FBG Strain Sensor with embedded mount**

### Specifications of OESEN-STR-400:

Parameter	Unit	Value
Range	$\mu\text{Strain}$	$\pm 1000$ (larger strain range available)
Resolution	$\mu\text{Strain}$	1
Working Temperature	$^{\circ}\text{C}$	-50 - +80
Size (diameter x height)	mm	18 x 100

### Long Strain Range Strain Sensor with Model number: OESEN-STR-500

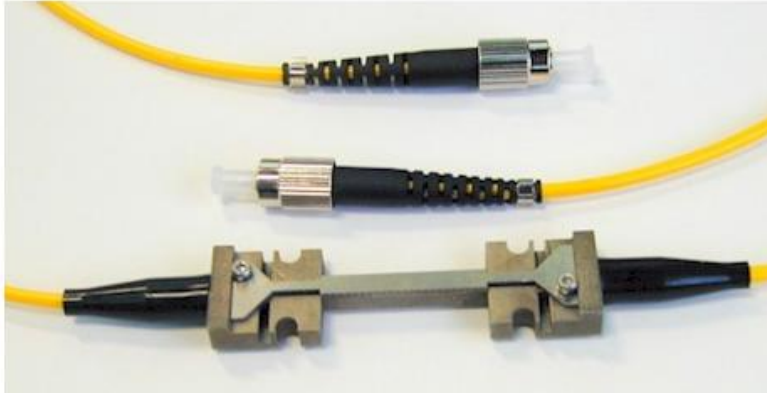


**Figure 5: FBG Long Range Strain Sensor**

### Specifications of OESEN-STR-500:

Parameter	Unit	Value
Range	$\mu\text{Strain}$	$\pm 1000$ (larger strain range available)
Size (Length x width x height)	mm	150 x 20 x 12
Working Temperature	$^{\circ}\text{C}$	-50 - +80
Mounting distance	mm	40

## Temperature Compensated Strain Sensor with Model number: OESEN-STR-600



**Figure 6: Temperature Compensated Fibre Bragg Grating Strain Sensor**

### Specifications of OESEN-STR-600:

Parameter	Unit	Value
Range	$\mu\text{Strain}$	$\pm 1000$
Resolution	$\mu\text{Strain}$	1
Working Temperature	$^{\circ}\text{C}$	-10 - +70
Size (diameter x height)	mm	70 x 20 x 12

Fibre Bragg grating temperature sensors with any wavelength can be delivered in a short time. Low cost product, quick delivery time, high reliability and good performance are our products' main features.

*Note: All specifications are subject to change without notice*

Please feel free to contact us at (514) 334-4588 or at [sales@o-eland.com](mailto:sales@o-eland.com) for more information on this product.