Fiber Optic Strain Sensor Manufacturers

Summary of Content

Leading manufacturers of fiber optic strain sensors include Luna, Sensuron, and Opsens Solutions, offering distributed, multipoint, and FBG-based sensing technologies for industrial and structural applications.

Luna

Luna provides a range of fiber optic strain sensing solutions capable of high-definition distributed measurements, multipoint sensing, and long-range monitoring. Their technologies include Rayleigh backscatter-based sensors for sub-millimeter spatial resolution, fiber Bragg grating (FBG) sensors for multiplexed strain measurement, and distributed acoustic sensing (DAS) systems for monitoring over optical fibers up to 100 km. Luna sensors are suitable for pipelines, highways, railways, power lines, and other demanding environments, offering precision and sensitivity beyond traditional strain gauges (Luna).

Sensuron

Sensuron specializes in optical fiber sensors that provide real-time, spatially continuous measurements of strain, temperature, deflection, and 2D shape. Their Distributed Fiber Optic Sensing (DFOS) systems transform a single fiber into thousands of virtual sensors, enabling high-resolution monitoring in harsh environments. Sensuron offers multiple interrogators, including the RTS250+, RTS125+, RTS040, GTR, SGTR, and AGTR-NEO, optimized for dynamic and static strain applications, aerospace integration, and structural health monitoring. These systems support high sampling rates, multi-channel monitoring, and low power consumption (Sensuron).

Opsens Solutions

Article Content

Fibre-optic strain sensors

Discover the Scaime range of fibre Bragg deformation sensors and fibre-optic strain gauges for up to 10,000 µm/m.

Fiber Optic Distributed Strain and Temperature Sensors

OZ Optics'' Foresight™ series of fiber optic distributed strain and temperature sensors (DSTS) are sophisticated sensor systems

Fiber Optic Strain Sensors: Principles and Applications

Fiber optic strain sensors are incredibly lightweight compared to traditional sensors, which translates into

Paulsson, Inc. | Fiber Optic Sensing Solutions | Pipeline Monitoring ...

Paulsson is a leader in advanced optical sensing solutions, specializing in fiber optic, seismic, acoustic, pressure, and temperature

All-metal packaged temperature compensation fiber optic Fabry-Pérot ...

This study introduces a novel approach that employs an all-metal encapsulated fiber-optic Fabry-Pérot (F-P) strain

Measurement of Gradient Strain Fields with Fiber-Optic Sensors

The results of measuring gradient strain fields by embedded or mounted point fiber-optic sensors based on Bragg

18 Fiber Optic Sensor Manufacturers in 2026

18 Fiber Optic Sensor Manufacturers in 2026 This section provides an overview for fiber optic sensors as well as their applications

Fiber Optic FBG Fiber Bragg Grating Sensing Solutions | AtGrating

AtGrating is a professional company for optical fiber sensing. AtGrating offers industrial solutions by providing customized sensors

Fiber Optical sensors for Industrial applications

Fiber optic solutions for industrial applications: temperature, pressure, displacement, strain by Opsens

Fiber Optic Strain and Temperature Sensing: Overview of Principles

Abstract: Fiber-optic sensing of temperature and strain over many advantages over electronic sensors. Fiber-Bragg-Gratings (FBGs)

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A strain-sensitivity-enhanced and asymmetric fiber-optic sensor based ...

Besides, it was significant for the strain-sensitivity-enhancement effect studying and the development of a new optical

Optical Fiber Strain Sensors | Springer Nature Link

Fiber optic sensor (FOS) technology uses optical fibers. FOSs offers important advantages over conventional

OSP-A fiber optic strain sensor, probe and transducer

WLPI-based fiber optic strain sensor for geotechnical, Aerospace and Defense, transportation, cryogenic superconductivity MR coils

Fiber-optic Sensors – distributed sensing, temperature,

Fiber-optic sensors are optical sensors based on fiber devices. They are often used for sensing

18 Fiber Optic Sensor Manufacturers in 2026

This section provides an overview for fiber optic sensors as well as their applications and principles. Also, please take a look at the

Fiber Optic Strain Sensing

Luna''s optical fiber technology delivers strain measurements that go beyond what''s possible with traditional strain gages. Fiber optic

Optical Fiber Sensors: High Resolution Fiber Optic

Measured in real-time, Sensuron''s Fiber Optic Sensing technology ensures precise measurement and

Fiber-Optic Strain Sensing | Luna

Luna''s fiber optic sensing solutions deliver strain measurements that go beyond what''s possible with

Fiber optic strain sensors and deformation gages

The miniature size and high accuracy of Opsens fiber optic strain are perfect to measure any change in dimension due to stress,

18 Strain Sensor Manufacturers in 2026 | Metoree

This section provides an overview for strain sensors as well as their applications and principles. Also, please take a look at the list of

Optical fiber strain sensor with high and tunable sensitivity

Therefore, new methods need to be developed further for economic high-sensitivity strain sensors. In this paper, an ultrasensitive

Laboratory Tests Using Distributed Fiber Optical Sensors for Strain ...

For using any sensor, a calibration curve and parameters are required. In the case of strain sensors, calibration is

Optical Strain Sensors – strain gauges, fiber Bragg gratings, point ...

Optical strain sensors measure strain and temperature, using point or distributed sensors with techniques to separate both effects.

Optical Strain Sensors – Buyer''s Guide & Suppliers

This buyer''s guide for optical strain sensors provides technical background, comparison of major types, selection criteria, and an

Fiber optic sensor & transducer for structural health monitoring

Fiber optic sensor for strain, linear displacement and deformation monitoring. Designed for structural health monitoring. Easy to

Fiber-Optic Strain Sensing | Luna

Measure strain with fiber optic sensors for high-resolution distributed, multipoint, and long-range monitoring

HD6S | High-Definition Fiber Optic Strain Sensors | Luna

Unlike conventional strain gages that only measure strain at a discrete point, Luna''s high definition fiber optic strain gages provide

Fiber Optic Strain Sensing

Fiber optic strain sensors can be embedded and installed in locations traditional strain gages cannot and deliver an unprecedented

A high sensitive fiber-optic strain sensor with tunable ...

A high sensitive fiber-optic strain sensor, which consists of a cantilever, a tandem rod and a fiber collimator, was

Fiber Optic Strain Sensor

Fiber Optic Strain Sensor manufacturers, handling companies and product information Reference price is compiled here.

Flexible Substrate-based Optical Fiber Strain Sensor

Fiber Bragg grating (FBG) sensors are of great interest because of their small size, anti-electromagnetic interference, and

Fiber optic 2-D sensor for measuring the strain inside the concrete ...

Fiber''s small dimension and high mechanical strength also enable them to be used as embedded sensors for concrete

Strain Measurement |Distributed Temperature Sensing

Static Strain Distributed Fiber Optic Sensing System Sensuron''s Static Strain distributed fiber optic sensing system replaces single

os3100 | Optical Strain Gage | Luna Fiber Optic Products

Based on fiber bragg grating technology, the os3100 Optical Strain Gage is designed to make fiber handling easy and sensor

Fiber optic strain gauges | Althen Sensors

Fibre optic strain sensors are suitable for precise deformation measurement without temperature compensation. Find out more here.

Contact Us

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