

Fiber Optic Strain Sensor Manufacturer Supply



Article Overview

Fiber optic strain sensors are widely available from global suppliers, with a growing market driven by structural health monitoring, aerospace, and industrial applications.

Market Overview

The global fiber optic strain sensor market was valued at USD 555.4 million in 2025 and is projected to reach USD 1,200 million by 2035, growing at a CAGR of 8%. This growth is fueled by increasing demand for structural health monitoring (SHM), industrial automation, and renewable energy applications, as well as technological advancements in sensor sensitivity and miniaturization .

Key Suppliers

Major suppliers and manufacturers include OptaSense, OZ Optics, HBK, Vishay Precision Group, Geosense, Fiso Technologies, Sensoror AS, and Robertson Geo. Recent industry developments include acquisitions and partnerships, such as OptaSense being acquired by Robertson Geo to expand downhole sensing capabilities, and OZ Optics partnering with National Instruments for integrated data acquisition solutions .

Sensor Types and Technologies

Fiber optic strain sensors are categorized into:...

Article Content

Sep 24, 2025

How Does an Optical Strain Gauge Work?

An optical strain gauge, or fiber optic strain sensor, is a device that uses fiber optical technology to measure the strain

Dec 05, 2025

Luna Innovations | Fiber Optic Sensing and Measurement Systems

At Luna Innovations we are leveraging our novel fiber-optic sensing technology to unlock new possibilities in geotechnical and civil

Mar 17, 2026

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.

May 19, 2026

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,

Feb 07, 2026

Fiber optic strain gauges | Althen Sensors

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

Aug 26, 2025

Fiber Optic Strain Sensor: Working, Advantages, and Disadvantages

Explore fiber optic strain sensors, including FBG and plastic types, their working principles, advantages, and disadvantages in

Oct 12, 2025

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

Apr 06, 2026

Fiber-Optic Strain Sensing | Luna

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

Dec 02, 2025

What Are Optical Strain Sensors and How Do They Work?

Fiber optic strain sensors work by utilizing the principle of light transmission through the optical fiber. When the fiber is

Sep 10, 2025

Fiber Optic Distributed Strain and Temperature Sensors

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

Sep 14, 2025

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

Apr 22, 2026

Optical fiber strain sensor with high and tunable sensitivity

We demonstrate a fiber-optic strain sensor with high and tunable sensitivity by constructing a Fabry-Perot

Apr 07, 2026

Fiber-Optic Strain Sensing | Luna

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

Apr 18, 2026

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

Feb 20, 2026

Optical Strain Sensors – Buyer's Guide & Suppliers

13 suppliers for optical strain sensors are listed in the RP Photonics Buyer's Guide, out of which two

Mar 04, 2026

Reflection-Based Optical Fiber Strain Sensor Using Polarization ...

A strain fiber optic sensor is proposed and experimentally demonstrated in this letter. The sensor operates in reflection mode, and its

Mar 02, 2026

Fiber Optic Strain Sensing

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

Sep 12, 2025

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)

Sep 29, 2025

Fiber Optic Sensor Manufacturer: 3800+ Global Suppliers

Find 3800+ fiber optic sensor manufacturers for industrial, medical, and telecom applications. Need high-precision

Mar 18, 2026

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

Sep 30, 2025

What are Fiber Optic Strain Sensors and How Do They Work?

Conclusion Fiber optic strain sensors represent a significant leap forward in strain measurement technology, offering

Aug 03, 2025

Optical Fiber Strain Sensors | Springer Nature Link

Fiber optic systems are superior to metallic conductors because it is possible to transmit a signal that contains more

Sep 09, 2025

HBM Strain Gauges: First Choice for Strain Measurements

Strain gauges (often also referred to as strain gages) are the key asset for measuring fatigue and testing materials for better and

Apr 07, 2026

Fiber Optic Strain Sensors: Principles and Applications

Discover the fundamentals of fiber optic strain sensors, their diverse applications, and exciting future trends

Apr 11, 2026

Tailored fiber optic sensing components & solutions

Tailored fiber optic sensing components & solutions. With our unique fiber optic technologies we offer high

Jan 10, 2026

FIBER-OPTIC SENSORS

For over 30 years OMRON has been a supplier of fiber optic solutions to leading manufacturers, especially in the semiconductor, the

Mar 01, 2026

FBG Fiber Optic Bragg Grating Strain Sensor/gauge Supplier | AtGrating

AtGrating provides premium quality fiber bragg grating strain gauge with advanced technologies. This kind of sensor is the most

Jun 28, 2026

Fiber Optic Strain Sensing

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

Aug 15, 2025

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

May 30, 2026

Fiber Optic Strain Sensor

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

Mar 31, 2026

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

Sep 10, 2025

18 Strain Sensor Manufacturers in 2026 | Metoree

Luna Innovations, founded in 1990, is a manufacturer of fiber optic sensing and non-destructive testing products such as high

Contact Us

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