

High Temperature Fiber Optic Sensor Manufacturer



Overview

10 Fiber Optic Temperature Sensor Manufacturers in 2026 This section provides an overview for fiber optic temperature sensors as well as their applications.

Key Takeaways

Leading companies in high-temperature fiber optic sensors include OSENSA, Luna, FISO, Rugged Monitoring, and COMEM, offering solutions for industrial, energy, and research applications. OSENSA Innovations

OSENSA specializes in fiber optic temperature sensing and partial discharge monitoring for industrial applications such as switchgear, data centers, and energy systems. Their sensors are immune to electromagnetic interference (EMI), compatible with high voltage, RF, and magnetic fields, and support both on-premise and cloud monitoring with historical trending and alarms. OSENSA has deployed over 10,000 systems worldwide, providing continuous 24/7 monitoring in critical power industry environments .

Luna



Luna offers high-definition fiber optic temperature sensing using Rayleigh backscatter and fiber Bragg gratings (FBGs). Their sensors provide sub-millimeter spatial resolution and can be embedded in locations inaccessible to traditional sensors. Luna's solutions are ideal for harsh environments, reducing cabling requirements while delivering precise, continuous temperature and strain measurements over long distances .

FISO

FISO develops fiber optic sensors and signal conditioners for medical, energy, process control, and R&D applications. They provide expertise in selecting the right fiber optic solutions for high-temperature and industrial environments, supporting global customers in Asia, Latin America, and Europe .

Rugged Monitoring

Rugged Monitoring produces fiber optic temperature sensors based on GaAs crystals, designed for high sensitivity and accuracy. Their sensors are immune to EMI, intrinsically safe, and capable of distributed sensing over long distances, making them suitable for utilities, renewable energy, data centers, and EV charging stations .

COMEM

COMEM manufactures GaAs-based fiber optic sensors for high-voltage and harsh industrial environments. Their sensors are fully non-metallic and dielectric, providing complete immunity to electromagnetic and RF fields. COMEM's solutions are optimized for fast, precise, and repeatable temperature measurements, even in microwave or high-frequency interference conditions .

Summary

These companies provide robust, high-temperature fiber optic sensors suitable for extreme industrial conditions, including high voltage, strong magnetic fields, and EMI-prone environments. Their technologies include GaAs crystal tips, fiber Bragg gratings, and Rayleigh backscatter, offering high precision, distributed sensing, and long-term reliability. Depending on your application—whether energy, industrial, or research—these manufacturers offer tailored solutions for accurate and safe temperature monitoring.

Article Content

10 Fiber Optic Temperature Sensor Manufacturers in 2026

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

Fiber Optic Temperature Sensing and Measurement

High-Definition Distributed Temperature Sensing Multipoint Temperature Measurement Long-Range Distributed Temperature Sensing with OptaSense Strain sensors based on fiber Bragg gratings (FBGs) deliver accurate and stable strain measurements that can be multiplexed and distributed over a large area using a single optical fiber sensor network. 1. Combine multiple point sensors on single fiber channel 2. Based on fiber Bragg gratings (FBGs) 3. Versatile and rugged temperature sensor options...See more on lunainc fjinno

Fiber optic temperature sensor-temperature monitoring

INNO is a manufacturer of fiber optic temperature measurement devices and fluorescent fiber optic

Switchgear Temperature Monitoring | OSENSA Fiber Optic Sensors

OSENSA offers advanced fiber optic temperature sensors tailored for motor and generator applications. These sensors provide

Progress Toward Sapphire Optical Fiber Sensors for High-Temperature ...

High-temperature measurements are of significant importance in various harsh-environment engineering fields, such

Fiber optic sensors and fiber optics | Baumer international

Fiber optic sensors and fiber optics - limitless and customized The perfect solution with the fiber optics

E32 Heat resistant | OMRON, Europe

E32 Heat resistant Heat resistant fiber sensor heads The wide range of heat resistant fibers provides long sensor lifetime with

Fiber optic temperature sensors | Althen Sensors

Advantages of Fiber Optic Temperature Sensors Immune to electromagnetic interference (EMI) Ideal for applications in high-voltage

OSENSA Innovations | Fiber Optic Temperature Sensing & Partial ...

Leading developer of fiber optic temperature sensing and partial discharge monitoring solutions for switchgear, data centers, energy,

High Temperature Fiber Optics

High temp fiber optics are used where the temperature is too hot for plastic fibers. Popular use in thermal process applications.

Fiber Optic Sensors & Transducers its Types and

Manufacturer of High-Performance Fiber Optics Sensors. Delivering Accurate, Reliable Sensing Solutions

Fiber optic sensors

Designed for high-voltage, magnetic field-intense, and harsh industrial environments, these sensors deliver

Top 10 Fiber Optic Temperature Sensing System Manufacturers

Whether you are specifying a new high-voltage switchgear installation, upgrading an existing power substation,

HT Fiber Device, High Temperature Fiber Optic Sensing System

HT Fiber Device Products High-temperature resistant optical devices are becoming more and more necessary for sensors, high

Optical Fiber Sensors: High Resolution Fiber Optic

Our range of Fiber Optic Sensors fit a variety of applications across industries. Along with obtaining

Optical Temperature Sensors – fiber Bragg gratings, point sensors ...

This article provides a comprehensive overview of optical temperature sensors, which utilize optical technology, particularly fiber

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

Fiber optic temperature sensors | Althen Sensors

We offer standard temperature sensors but can also help you with a customized design or a complete measurement solution. Fiber

Opsens Solutions| Fiber Optic Temperature Sensors

Opsens Solutions" fiber optic temperature sensors provide second to none performance to various industries. Our applications

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