

# Conax Fiber Optic Temperature Sensor FOTS



## Overview

Conax Buffalo Technologies' patented Fiber Optic Temperature Sensor system extends temperature applications beyond current thermocouple technology. For industrial temperature measurement in oxidizing and inert atmospheres (700-1750°C) and gas turbine inlet temperature measurement. Whether it's a unique, customized solution or a standard product from our catalog, Conax is your fully-integrated source for all types of temperature sensors. With over 70 years of engineering solutions, our customers count on us to help them meet. The FOTS fiber optic temperature sensor probes deliver industry-leading accuracy, repeatability, and reliability across diverse applications. Based on the intrinsic temperature-dependent quantum effects of bandgap materials, the FOTS sensor features a compact sensing crystal at the fiber tip, ideal. Our fiber optic sensors use a Gallium Arsenide (GaAs) crystal at the fiber tip, making them ideal for highly accurate temperature measurements in environments exposed to microwave radiation and high-frequency interference.



## Article Content

Oct 05, 2025

Fiber optic sensors

Our fiber optic sensors use a Gallium Arsenide (GaAs) crystal at the fiber tip, making them ideal for highly accurate temperature measurements in environments

May 21, 2026

Optical Fiber Based Temperature Sensors: A Review

In this article, we have reviewed several optical fiber-based temperature sensors reported in recent decades, including their design, fabrication, sensing materials,

Apr 17, 2026

Datasheet

The FOTS fiber optic temperature sensor probes deliver industry-leading accuracy, repeatability, and reliability across diverse applications. Based on the intrinsic temperature-dependent quantum effects

Aug 11, 2025

Fiber Optic Temperature Sensing and Measurement | Luna

Fiber optic temperature sensors are immune to the many environmental effects that compromise other measurement technologies, can be embedded and installed in

Jan 17, 2026

Conax Technologies

Conax Technologies' FSA optical fiber sealing assemblies enable a range of sizes of fiber optic cable to pass through environmental boundaries. Fibers are housed in individual, protective stainless steel

Feb 08, 2026

The Definitive Guide to Fiber Optic Temperature Sensor Applications

Fiber Optic Temperature Sensors (FOTS) offer unparalleled performance in extreme environments where traditional sensors fail, primarily due to their complete immunity to

Jul 11, 2025

Standard and custom temperature sensors from Conax Technologies

GlobalSpec Product Announcement for Standard and custom temperature sensors - Conax Technologies has been engineering reliable temperature sensing solutions for over 70 years. Our

Jul 25, 2025

### FOTEMP TS Series Fiber Optic Temperature Probes

High precision FOTEMP TS fiber optic temperature probes are for operating environments where conventional electronic-based temperature sensors,

Dec 15, 2025

### Fiber Optic Temperature Sensor

Based on the intrinsic temperature-dependent quantum effects of bandgap materials, the FOTS sensor features a compact sensing crystal at the fiber tip, ideal for tip

Feb 24, 2026

### Datasheet

Based on the intrinsic temperature-dependent quantum effects of bandgap materials, the FOTS sensor features a compact sensing crystal at the fiber tip, ideal for tip measurement applications. Immune to

Mar 30, 2026

### Conax TGF/MTGF Series

Conax TGF/MTGF Series – High Temperature Wire Compression Seal Feedthrough TG assemblies with fiberglass-insulated thermocouple wire are specially designed for applications where the sensor

Feb 06, 2026

### How to Choose the Right Fiber Optic Temperature

Choosing the right FOTS is essential—an incorrect match risks inaccurate readings or integration issues. Whether for power, oil, aerospace, or

Mar 11, 2026

### Conax Technologies Feedthroughs Data Sheets | GlobalSpec

Conax Technologies Datasheets for Feedthroughs Feedthroughs transmit electrical current, fluids, optical signals, or mechanical motion through the walls of a pressurized or vacuum system through a

Jul 24, 2025

### Standard and custom temperature sensors from Conax Technologies

Specialized temperature sensing solutions from Conax Exhaust gas thermocouples for FT8/GG8 frame turbines – lower cost EGT sensor with dual channel design that lasts longer and is more accurate

May 21, 2026

Datasheets and Manuals

FOTEMP-T30 Series Multichannel Fiber Optic Temperature Sensing System for Transformer Hotspot Monitoring Datasheet Manual Protocol Manual Resources

Nov 24, 2025

Opsens Solutions| Fiber Optic Temperature Sensors

Fiber-optic temperature sensors for industrial applications involving harsh environments such as high voltage, electromagnetic interferences, microwaves,

Aug 15, 2025

How to Choose the Right Fiber Optic Temperature

Fiber optic temperature sensors (FOTS) have emerged as a transformative solution, using light instead of electricity for precise, interference

Jan 20, 2026

NRC Engineering & Trading Co., Ltd.

Conax Buffalo Technologies" patented Fiber Optic Temperature Sensor system extends temperature applications beyond current thermocouple technology. For industrial temperature measurement in

Aug 30, 2025

Optical Fiber Based Temperature Sensors: A Review

Among all the reported applications, optical waveguides have been widely exploited to measure the physical and chemical variations in the surrounding environment.

May 16, 2026

Optical Fiber Based Temperature Sensors: A Review

Summary of various optical fiber-based temperature sensors. Experimental setup for a temperature sensor based on an FLM.

Aug 09, 2025

Datasheets and Manuals

FOTEMP-T20 Series Multichannel DIN Rail Mount FO Temperature Sensor Signal Conditioner (formerly FOTEMP T2) Datasheet Manual Protocol Manual Resources

Oct 25, 2025

#### FISO Fiber Optic Temperature Sensors

FISO's Fiber Optic Temperature Sensors provide accurate, stable, and repeatable measurements. These measurements are based on variations of the reflected

Mar 22, 2026

#### Download Literature

4-page brochure that gives a brief overview of the type of sensors and fitting Conax manufactures for this industry Conax #6037 [Click Here to Download Sensores y](#)

Apr 13, 2026

#### Transformer Winding Hotspot Temperature Monitoring -

Power and Distribution Industries fSENZ's offered fiber optic temperature sensing (FOTS) is ideal for monitoring the temperature of oil-filled transformers and cast

Mar 18, 2026

#### Optical Fiber Sensors for High-Temperature Monitoring:

High-temperature measurements above 1000 °C are critical in harsh environments such as aerospace, metallurgy, fossil fuel, and power production. Fiber-optic high

Aug 27, 2025

#### Conax High Temperature Thermocouple Assemblies

Operating Temperatures up to 4200°F (2315°C) Conax Technologies' High Temperature Thermocouples are specifically designed for durability and reliability in high temperature applications to 4200° F

Aug 11, 2025

#### EFFECTS OF INSTALLATION POSITION OF FIBRE

Abstract and Figures Fibre Optics Temperature Sensors (FOTS) have been used to measure the Hot-spot Temperature (HST) in power transformers for

Jul 10, 2025

#### Conax High Temperature Instrumentation Wire Compression Seal ...

The assembly consists of bonded fiberglass-insulated/silicone impregnated thermocouple grade wires on the body side, with stripped bare wires passing through the Conax-manufactured transducer

Nov 09, 2025

## Fiber Optic Temperature Sensors: Types, Working

Explore the structure, working principles, advantages, and disadvantages of Fiber Optic Temperature Sensors for accurate temperature measurement in diverse

## Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://regen-power.co.za>

Email: [info@regen-power.co.za](mailto:info@regen-power.co.za)

Phone: +49 176 845 2036

Address: Taunusanlage 15, 60325 Frankfurt am Main, Germany

This document is for informational purposes only. Specifications subject to change without notice.

