# FIBER OPTIC **TEMPERATURE SENSOR TSNANO KEY FEATURES** → Temperature Range: - 200 °C to + 200 °C → High Accuracy: +/- 1°C → Completely non-conductive → Immune to RFI, EMI, NMR and microwave radiation → Resistance to high temperatures → Robust → Miniature size → Stable and repeatable measurements → Self assembly with NANO-Kit → GaAs-based Nano powder temperature sensor



**APPLICATIONS**→ Process monitoring

→ Semiconductor industries

→ Large industrial ovens, furnaces, or dryers



#### FIBER OPTIC TEMPERATURE SENSOR

## **TSNANO**

#### **DESCRIPTION**

For durability, flexability and minimum size requirements we developed the TSNANO fiber optic temperature probe. Due to its renewable sensor crystals, the temperature sensors are ideal for process monitoring as well as in situ installation by the user. Field or in situ installation is performed with the NANO-Kit (see separate data sheet).

The TSNANO temperature sensors are ideal for longterm, permanently installed applications. Designed for a temperature range from -200°C to +200°C and a response time of 10s, the probe guarantees high accurcy measurement. Its PTFE jacket provides immunity to RFI, EMI, NMR and microwave radiation. The sensor cable can be from several meters to kilometers long without influencing the accuracy of the measurement result.

Starting at 850nm, GaAs becomes optically translucent for which the position of the band gap is temperature dependent. Various models of FOTEMP Signal Conditioners are available depending on the number of input channels required and mounting configuration.

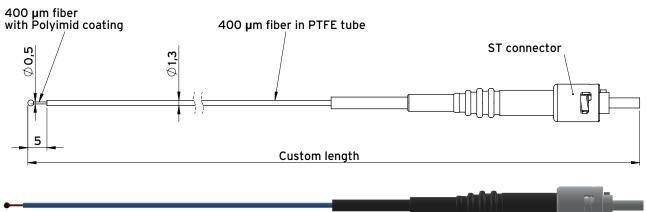
#### TECHNICAL SPECIFICATIONS

Name of sensor	TSNano, The renewable
Temperature range	- 200°C to + 200°C
Accuracy	+/- 1°C
Response time	≤ 10s
Fiber Ø	<b>400</b> μm
Sensor length	2m standard Other lengths available upon request
Optical Connector	ST standard Other connector types available
Signal conditioner	Compatible with all FOTEMP series fiber optic thermometers

Specifications subject to change without notice

#### DIMENSIONS

All dimensions in mm.



### **Ordering Info**

TSNANO-

Sensor Length • (in meters)

02 2 meters 6 meters

Other lengths available upon request

**Quick Ship Sensors and Accessories:** 

TSNANO-02 Length=2 meters **NANO-KIT** TSNANO termination kit



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