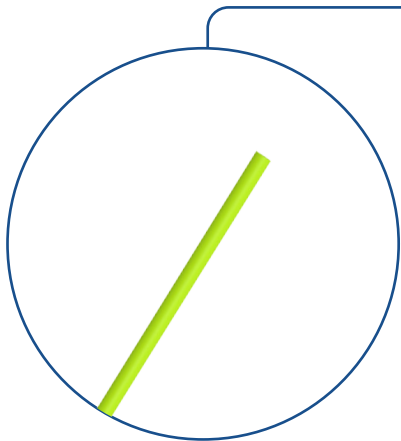


# LSENS-T

## Fiber Optic Temperature Sensors



**A multiuse fiber optic temperature sensor for measurement in a wide range of demanding applications where immunity to electromagnetic fields and explosion proof requirements are mandatory.**

A multiuse fiber optic temperature sensor designed for a wide range of applications, especially for the use in R&D and industrial applications. The sensor offers complete immunity to RFI, EMI, NMR, Corrosive and microwave radiation making it the best choice for all demanding applications. The standard temperature sensor has a response time of 0.2 s. With a standard deviation of +/-0.2 °C it allows precise and repeatable measurements. The coating of the temperature sensor is made of PTFE, while the fiber tip has a diameter of 1.1mm and has a stainless steel ST-connector. For mechanical stability and applications e.g. in oil special protective coatings and hoses are available. The fiber optic probe consists of a PTFE protected glass fiber and a GaAs-crystal (Gallium Arsenide) at the sensor tip. It is totally free of metal and immune to external fields, therefore probes are explicitly suitable for use in high temperature ranges as well as in aggressive operating environments. The sensor cable can be from several meters to kilometers long without influencing the accuracy of the measurement result. Other sensor lengths and connector types are available upon request.

### Features

- PTFE protected
- Outstanding repeatability with high flexibility
- Complete immunity to RFI, EMI, NMR and microwave radiation
- Does not require recalibration or complex input to operate
- Liquid proof and withstands aggressive chemical solutions

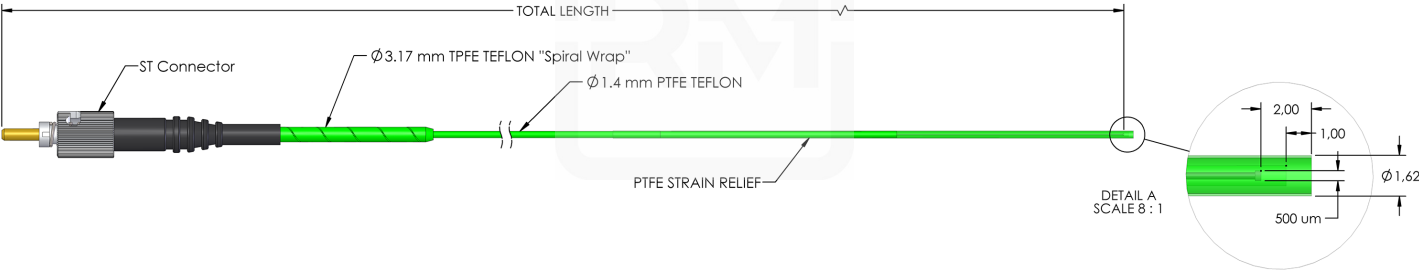
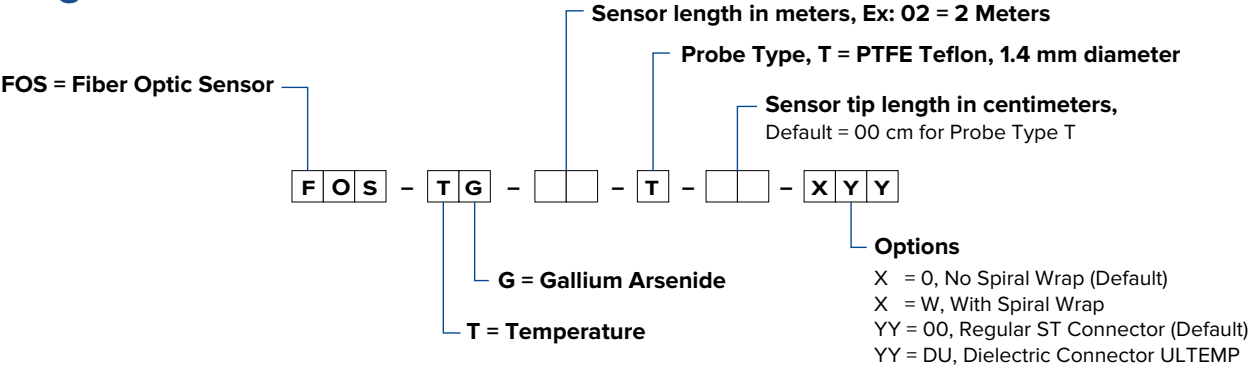
### Benefits

- Sensors do not require any recalibration
- No shift over time, high stability
- Optional spiral wrap
- Robust fiber optic temperature sensor
- Available in different cables and sheath options
- Customizable according to customer specific applications
- Suitable for OEM-type applications.

**Applications**

- Magnetic, RF and Microwave environments
- High voltage environments
- Nuclear and hazardous environments
- Medical applications
- Aggressive Chemical environments
- Sterilization applications
- RF and microwave drying applications

**Ordering Code**



**Technical Specifications**

Temperature range	-200 °C to +250 °C
Temperature range (Optional Range extensions)	Down to 4 °K / Up to +300 °C
Repeatability	0.2 °C
Accuracy absolute temperature	+/- 0.8 °C
Accuracy relative temperature	+/- 0.2 °C
Probe sheathing material	Teflon Coated
Connector	Stainless Alloy / Optional - Dielectric
Response time	Up to 0.2 Sec
Probe sensitive area - Diameter	1.4 mm