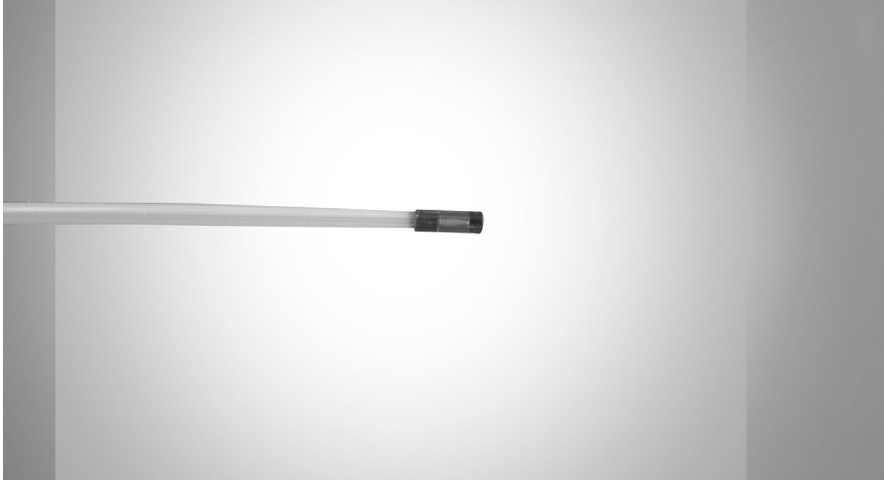


# FIBER OPTIC TEMPERATURE SENSOR

FOR R&D AND INDUSTRIAL APPLICATIONS

## KEY FEATURES

- Good accuracy
- Small and robust design
- Outstanding repeatability
- EMI/RFI/RFI and microwave immune
- Intrinsically safe
- OEM-type and custom version



**OTG-A** Compatible with Opsens Solutions' GaAs (SCBG) signal conditioners

## DESCRIPTION

Opsens Solutions' OTG-A fiber optic temperature sensor offers the **highest performances in the industry**. The OTG-A sensor uses the well proven technique based on the temperature-dependent bandgap of GaAs crystal as the temperature transduction mechanism. Its small sensing GaAs crystal located at the tip of the optical fiber makes it convenient for tip measurement applications.

Combined with Opsens Solutions' SCBG (Semiconductor Bandgap) signal conditioning technology and with the inherent advantages of fiber optic, the OTG-A delivers unprecedented repeatability and reliability in the most adverse conditions such as high level of EM, RF, MR and microwave field environments.

The standard operating range of the OTG-A is from **-40 °C to +250 °C**. Higher temperature ranges up to 300 °C are available upon request.

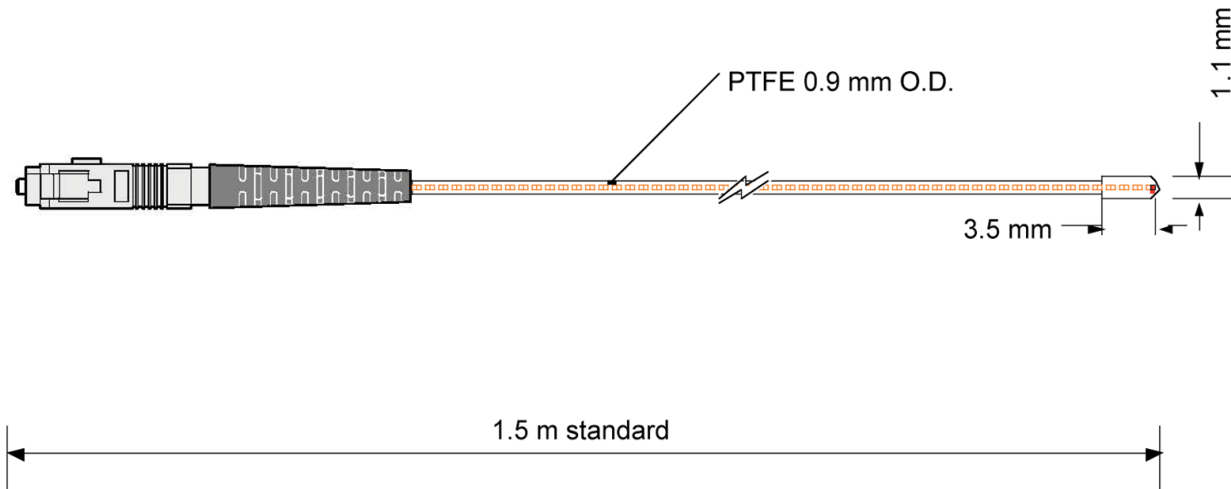
The OTG-A is made with industry standard optical fiber and is compatible with all Opsens Solutions' SCBG signal conditioners. This compact and robust fiber optic temperature sensor is available with different optical cables and sheath options and is customizable according to customer specific applications or for OEM-type applications.

## APPLICATIONS

- Microwave assisted chemistry
- EM, RF and microwave environments
- High voltage environments
- Sterilization applications
- In-situ process control
- RF and microwave drying applications
- Nuclear and hazardous environments

# OTG-A

## FIBER OPTIC TEMPERATURE SENSOR



### SPECIFICATIONS

TEMPERATURE OPERATING AND CALIBRATED RANGE	-40 °C to +250 °C (other ranges available upon request)
ACCURACY	± 0.8 °C or better for other temperature range
RESPONSE TIME	0.5 s typical ( For faster response time, see the OTG-F product datasheet)
OPERATING HUMIDITY RANGE	0-100 %
EMI/RFI SUSCEPTIBILITY	Complete immunity
CALIBRATION	NIST traceable
CABLE LENGTH	1.5 meters standard (other lengths available)
OPTICAL CONNECTOR	LCA, ST standard
CABLE SHEATHING	Teflon™ PTFE
SIGNAL CONDITIONER COMPATIBILITY	All Opsens Solutions' GaAs (SCBG) signal conditioners