



**WLPI BASED FIBER OPTIC  
TEMPERATURE SENSOR  
FOR DEMANDING APPLICATIONS  
AND ROUGH HANDLING USAGE**

Use with any of Opsens' WLPI series of signal conditioners

### Key Features

- Robust design
- Good accuracy
- Outstanding repeatability
- Low drift and low hysteresis
- EMI/RFI and microwave immune
- Intrinsically safe

### Applications

- EM, RF and microwave environments
- High voltage environments
- Nuclear and hazardous environments
- Sterilization applications
- In-situ process control
- RF and microwave drying applications
- Civil engineering and geotechnical applications

### Description

Opsens' OTP-P fiber optic temperature sensor offers the highest performances in the industry. The OTP-P sensor uses the temperature-dependent birefringence of specially selected crystal as the temperature transduction mechanism. Because of the pure monocrystalline material used, the OTP-P does not show thermal creeping or aging as with other fiber optic sensors based on the thermal dilatation of glass optical fibers.

Combined with Opsens' WLPI signal conditioning technology (patent # 7, 259, 862) and with the inherent advantages of fiber optics, the OTP-P delivers unprecedented repeatability and reliability in the most adverse conditions such as high level of EM, RF, MR and microwave fields environments as well as with high voltage and rapid temperature cycling conditions.

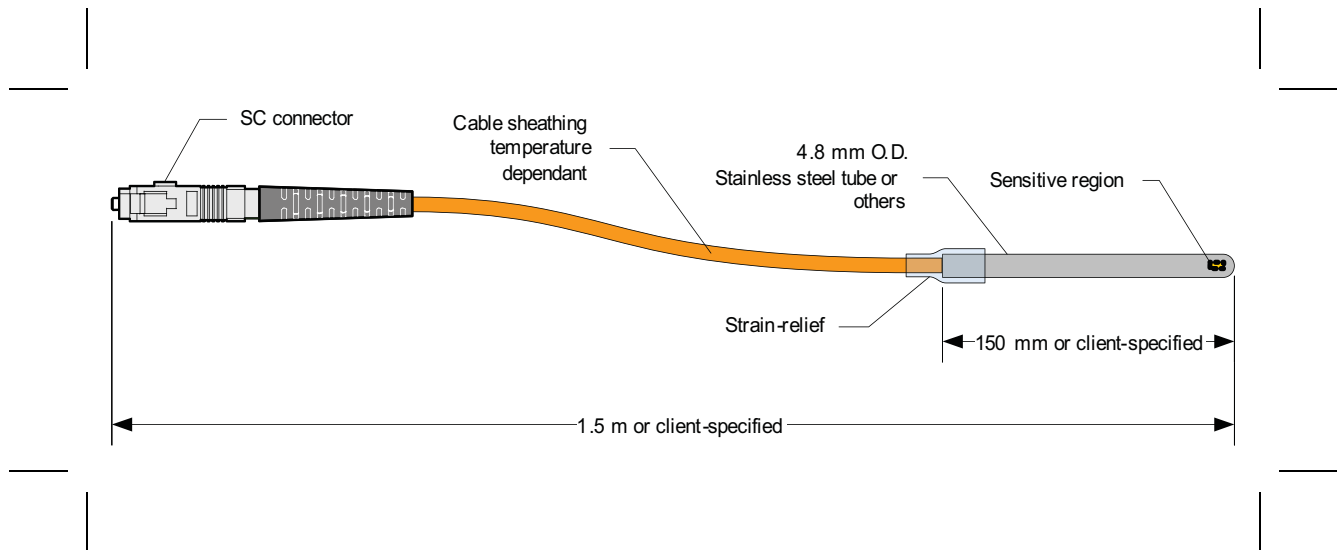
The standard operating range of the OTP-P is from -40 °C to +250 °C.

The OTP-P is compatible with all Opsens' WLPI signal conditioners. This robust fiber optic temperature sensor, available in different cables and sheath options, is customizable according to customer specific applications or for OEM-type applications.

#### Opsens

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## Specifications

Temperature operating and calibrated range	-40 °C to +250 °C
Resolution	0.1 °C
Accuracy	±1.0 °C @ ±3.3 sigma limit (99.9% confidence level)
Operating humidity range	0-100 %
EMI/RFI susceptibility	Complete immunity
Calibration	NIST traceable
Cable length	1.5 meters standard (other lengths available)
Optical connector	SC standard
Cable sheathing	Operating temperature range dependant (contact factory)
Thermowell material	Stainless steel (Ceramis or other materials available as option)
Signal conditioner compatibility	All Opsens WLPI signal conditioners

All specifications are subject to change without prior notifications