

# FIBER OPTIC TEMPERATURE SENSOR

FOR HERO/RADHAZ APPLICATIONS

## KEY FEATURES

- Fast response time
- Small and robust design
- Outstanding repeatability
- Complete immunity to mechanical vibration and multiple optical connections
- Intrinsically safe
- Immune to EMI, RFI and electrical interferences



## OTG-R Compatible with Opsens Solutions' GaAs (SCBG) RadSens-2 system

### DESCRIPTION

Opsens Solutions' OTG-R fiber optic temperature sensor offers the highest performances in the industry. The probe is perfectly tailored for reliable measurement of **Electromagnetic Environmental Effects** on **Electrically Initiated Devices (EID's)**. The OTG-R 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 bridge wire assembly and temperature monitoring for **HERO/RADHAZ applications**.

Opsens Solutions' OTG-R is immune to mechanical vibration and accepts extension cables without any signal degradation. The OTG-R delivers unprecedented repeatability and reliability in the most adverse conditions such as those related to EMI testing in anechoic chambers.

The OTG-R is made with industry standard optical fiber and is compatible with Opsens Solutions' GaAs (SCBG) **RadSens-2** signal conditioner. 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. Opsens Solution offers not only customized OTG-R sensors, we also provide custom installation services on a variety of EEDs available in the market.

### APPLICATIONS

- HERO/RADHAZ assessment
- Electronic Explosive Devices type application
- Pulsed Energy assessment
- Surface point temperature type application
- Dynamic temperature monitoring application
- Lightning effects on EEDs

# OTG-R

## FIBER OPTIC TEMPERATURE SENSOR FOR HERO/RADHAZ PROJECTS



### SPECIFICATIONS

TEMPERATURE OPERATING RANGE	0°C to +120 °C (other ranges available upon request)
RESOLUTION	< 35 dB below NFT
RESPONSE TIME	< 5 ms
EMI/RFI SUSCEPTIBILITY	Complete immunity
SENSOR DIAMETER	0. 15 mm O.D. (smaller version available upon request)
EMI/RFI SUSCEPTIBILITY	Complete immunity
CABLE LENGTH	1.5 meters standard (other lengths available)
OPTICAL CONNECTOR	LCA, ST standard
CABLE SHEATHING	PVC tight buffer (other option available)
SIGNAL CONDITIONER COMPATIBILITY	Opsens Solutions' GaAs (SCBG) RadSens-2 signal conditioner