



# °C OTG-R

## Description

The OTG-R fiber optic temperature sensor offers the highest performances in the industry. The probe is perfectly tailored for reliable measurement of Electro- magnetic 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 con- venient for bridge wire assembly and temperature monitoring for HERO/RADHAZ applications.

The OTG-R is immune to mechanical vibration and accepts extension cables without any signal degrada- tion. With a high resposne time of < 275 ms for MK1 and high resolution of < 35 dB below NFT, the OTG-R delivers unprecedented repeatability and reliability in the most adverse conditions such as high level of EM, RF, MR and microwave field environments.

The OTG-R is made with industry standard optical fiber and is compatible with the GaAs (SCBG) RadSens 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 appli- cations.

We offer not only customized OTG-R sensors, we also provide custom installation services on a variety of EEDs available in the market.

Compatible with GaAs (SCBG) RadSens signal conditioner

#### Key features

- Fast response time
- Small and robust design
- Resolution of < 35 dB below NFT
- Complete immunity to mechanical vibration and multiple optical connections
- Intrinsically safe
- Immune to EMI, RFI and electrical interferences

# Applications

- HERO/RADHAZ assessment
- Electronic Explosive Devices type application
- Dynamic temperature monitoring application
- Surface point temperature type application







## Specifications

Temperature operating range	0 °C to +120 °C (higher temperature ranges available upon request)
Resolution	< 35 dB below NFT
Response time	< 10 ms
MRI/EMI/RFI susceptibility	Complete immunity
Cable length	1.5 meters standard (other lengths available)
Optical connector	ST standard
Sensor diameter	0. 15 mm 0.D. (smaller version available upon request)
Cable sheathing	PVC tight buffer (other option available)
Signal conditioner compatibility	GaAs (SCBG) RadSens signal conditioner

All specifications are subject to change without prior notifications

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