

PRB-140

Fiber Optic Temperature Probe

MRI and Catheter Temperature Sensing

Non-magnetic, Non-Conducting, Optical Fiber Probes with Exceptional Precision

OSENSA's fast response PRB-140 very low artifact temperature probes provide accurate and reliable temperature sensing for a variety of life sciences, focused ultrasound, microwave and laboratory research applications requiring immunity to high intensity electro-magnetic fields and RF energy. These probes are constructed with high quality glass optical fiber and can handle temperatures from -40°C to 150°C while providing extremely fast response times. The small sensing element minimizes image artifacts in MRI environments up to 16 Tesla.

TECHNICAL SUPPORT

OSENSA Innovations offers on-site support, commissioning, and training for all of its products. For immediate assistance with any technical issue, please contact support@osensa.com or call 1-888-732-0016.

WARRANTY INFORMATION

OSENSA Innovations stands behind its products and services. All fiber optic temperature probes and signal conditioners ship with a full one year repair or replacement warranty. You may also purchase an extended five year warranty. Some conditions apply.

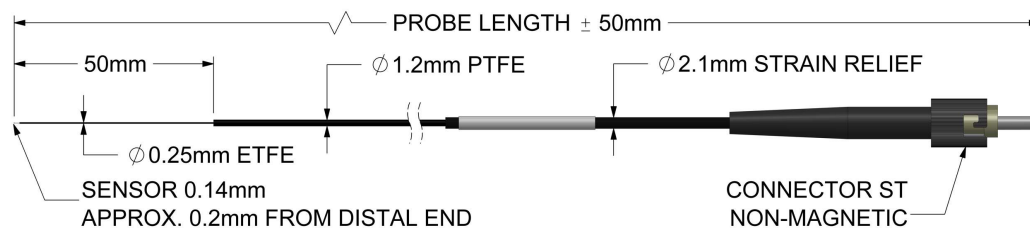
CUSTOM OEM SOLUTIONS

OSENSA offers cost-effective design and consulting services at discounted rates for high-volume OEM customers. Let the engineering team at OSENSA Innovations help you rapidly develop custom probes for your research application. OSENSA's team has many years of experience designing fiber optic temperature probes for various laboratory environments.

FURTHER INFORMATION

For more information on any of our products or services please visit our website: www.osensa.com or email: info@osensa.com.

PRB-140-2M-STM-MRI-50



Product Specifications

System Specifications	PRB-140-2M-STM-MRI
Calibrated Accuracy ¹ (20°C to 60°C)	$\pm 0.10^\circ\text{C}$
Stability (15min)	$\pm 0.05^\circ\text{C}$
Noise (1 second averaging)	$\pm 0.05^\circ\text{C}$
Measurement Range	-40°C to 150°C
Immersion Response Time Constant	150ms
Tip Diameter	250 μm
Minimum Bend Radius	16mm
Probe Materials	ETFE

Notes:

1. Calibrated accuracy is valid within $\pm 20^\circ\text{C}$ of calibration point. A custom calibration is required for accuracy to be valid across the full sensing range.
2. Submersion in aqueous solutions like PAA gel or Saline will shift the temperature reading 0.2°C higher with stability reached in 30min. After removing from water, the probe will return to original calibration after 1 hour drying at 40°C .
3. Compatible with OSENSA's FTX-300-LUX+ and LUX+HG series fiber optic signal conditioners.
4. Probe lengths can be specified from 0.5m to 5m.
5. For longer distances add extension cable EXT-200-10M-STM-STM, in lengths from 2m to 10m.

