

Small Diameter Temperature Measurement

Non-magnetic, non-conducting, fiber optic probes with exceptional precision

OSENSA's PRB-500 fiber optic temperature probes are ideal for MRI and research applications including for small animal studies, dermal sensing, and phantom device testing. The PRB-500 style is a general purpose, all polymer optical fiber temperature sensor that can withstand repeated use and cleaning. The PRB-500 probes are compatible with MRI phantom gels and can be used in magnetic fields up to 16 Tesla with no temperature shift. These probes offer industry leading accuracy, precision, and reliability.

Probe Specifications

PRB-500-02M-STM-MRI



Specifications	PRB-500-02M-STM-MRI
Calibrated Accuracy ¹ (10°C to	± 0.10°C
Stability (15 minute)	± 0.03°C
Noise (1s averaging)	± 0.02°C
Measurement Range	-40°C to 100°C
Immersion Response Time	0.6 s
Fiber Core Diameter	500 μm
Tip Diameter	1000 μm
Minimum Bend Radius	10mm
Probe Materials	Nylon

Notes:

1. Calibrated accuracy is valid within ±20°C of calibration point. A custom calibration is required for accuracy to be valid across the full sensing range.
2. Compatible with OSENSA's FTX-100-LUX+, FTX-200-LUX+, FTX-300-LUX+, FTX-020-OEM, and HTX-100-MRI fiber optic temperature transmitters.
3. Probe lengths can be specified from 0.5m to 10m.
4. For longer distances add extension cable EXT-400-10M-STM-STM, in lengths from 2m to 20m.

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 power monitoring application. OSENSA's team has many years of experience designing fiber optic temperature probes for various industrial 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.

