

# OptoTemp 2000

## Fiber-optic temperature sensors

### Up to 1000 °C, Immune to EMI, Microwave

Designed for reliable operation in harsh chemical and electrical environments, the OptoTemp 2000 is unaffected by microwave/RF radiation and plasma. It can measure temperature up to 1000 °C, almost 700 °C higher than what competing fiber optic thermometers can reach.

### The OptoTemp Difference

MMI uses a proprietary phosphor technology (U.S. Pat. 9,599,518 B2) for its fiber optic thermal probes. The OptoTemp 2000 measures temperature using the information derived from fluorescence decay, a field proven technique in hundreds of industrial installations for more than 25 years. MMI probes can withstand thermal stress and harsh environments unattainable with hitherto technology.

### Benefits

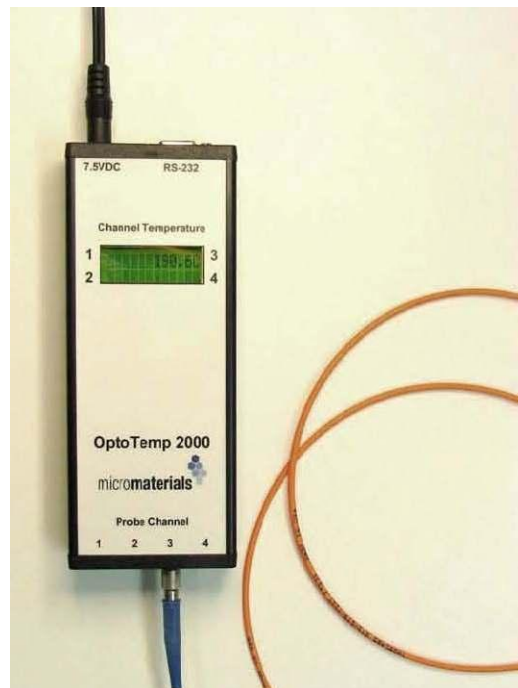
- Immune to EMI, RF and microwave
- Operates up to 1000 °C
- Precise and reliable
- Inert probe

### Applications

- Microwave/RF heating
- Chemical processing
- Molten metal measurements
- Plasma processing
- Semiconductor processing

### An Established Record

MicroMaterials has manufactured single crystal sensing elements since 1999. MMI's fiber optic products have been used by Fortune 500 companies around the world as well as U.S. government labs.



## Fiber- optic temperature sensors

### OptoTemp 2000-Controller Specifications

Channels	Up to 4
Response Time	250 msec
Sample Rate	4 samples/sec
Power Requirement	90-260 VAC, 50-60 Hz
Power Consumption	5W @ 7.5 VDC
Output Port	RS-232
Display	Back lighted LCD
Dimension	17 cm (L) x 7 cm (W) x 3 cm (H)
Housing	Anodized aluminum

	FLEX	SUPER	ULTRA
Temperature Range	15 °C to 230 °C	15 °C to 400 °C	200 °C to 950 °C *
Connector Type	ST	ST	SMA
Diameter	2 mm	1 mm or 3 mm	1 mm or 3 mm
Active Probe Length	15 cm **	15 cm **	15 cm **
Protective Sheath Material	PFA	ceramic	ceramic
Accuracy	+/- 0.5 °C	+/- 1.0 °C	+/- 2.0 °C
Precision (average of 8 samples)	+/- 0.5 °C	+/- 0.5 °C	+/- 1.0 °C

\* Extended ULTRA has range 150 °C to 1,000 °C with precision +/- 2.0 °C

\*\* Longer or shorter lengths available on custom probes

### For more information...

Please contact us at  
[info@micromaterialsinc.com](mailto:info@micromaterialsinc.com)

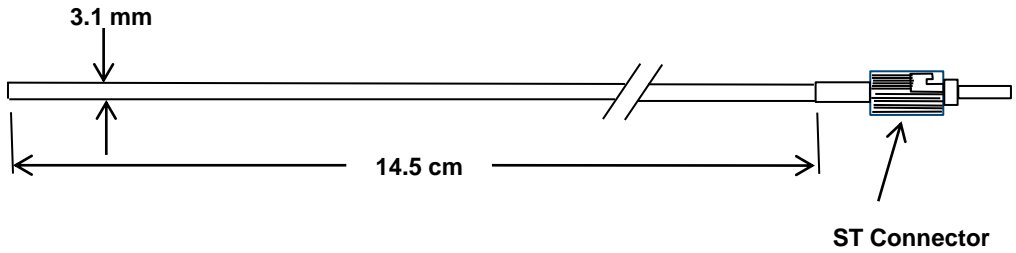
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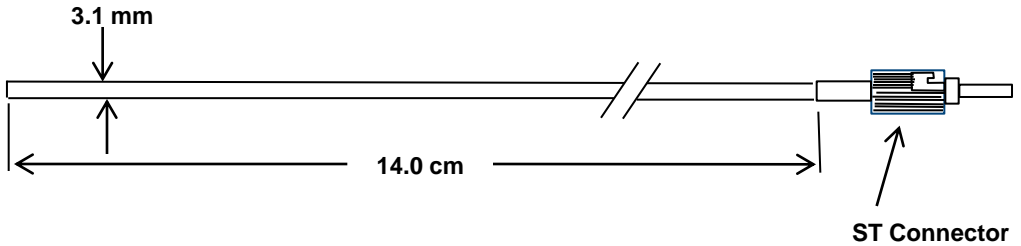


# OptoTemp 2000 Probe Dimensions

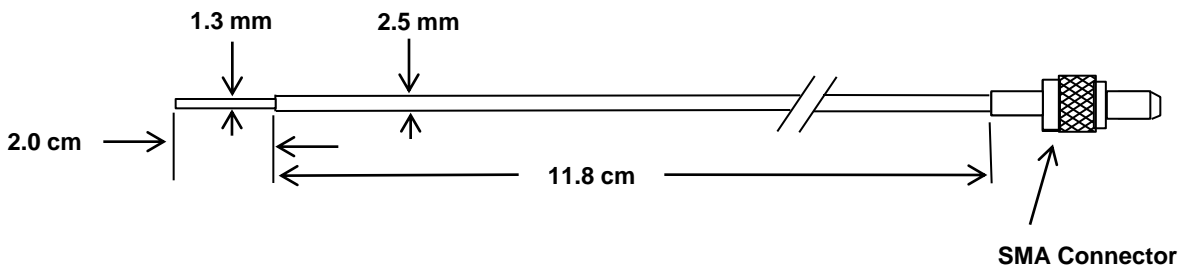
3 mm ULTRA Probe



3 mm SUPER Probe



1 mm ULTRA Probe



1 mm SUPER Probe

