

FLUOROPTIC® THERMOMETER

m3300 OEM Biomedical Module

Customized Fiber Optic Temperature Measurement for Medical Equipment

Industry Standard for Fiber Optic Thermometry

Luxtron's m3300 Series of OEM biomedical thermometers are fiber optic thermometers designed for measurement in demanding biomedical applications. The EMI immunity and inherent stability of Luxtron's patented Fluoroptic® sensor eliminates the problems encountered with conventional thermocouple or thermistor sensors in MR, RF, and microwave environments. The m3300 supercedes Luxtron's 3200 Series of OEM biomedical thermometers, hundreds of which have been installed and are used daily in treatments worldwide.

Easy Integration into Medical Devices

The m3300 OEM module is designed for easy integration into medical devices and patient monitoring systems where patient temperature or tissue temperature measurements are required in harsh electromagnetic environments.

Safe and Accurate Probes

The biomedical probes for use with the m3300 are entirely non-metallic in construction, minimally invasive, and suitable for direct insertion into patient tissue. The probes are protected in a jacket of Tefzel® and are only 0.5 mm in diameter. The small size allows fast thermal response and easy integration into catheters or needles. EtO gas is the recommended method of sterilization.

Luxtron offers custom probe development and manufacturing for OEMs. For more information, contact your local Luxtron representative.



Benefits

- MR Compatible and FDA 510(k) Classified
- Probes Immune to EMI, RF, MR and Microwave Interference
- Precise Measurements from Very Small Sensor
- Rapid Response Time of 0.25 Seconds
- Minimally Invasive Probes

Applications

- Core Temperature Monitoring During MRI Scans
- Tissue Temperature Monitoring During RF or Microwave Ablation
- Tissue Temperature Monitoring During Hypothermia Treatments



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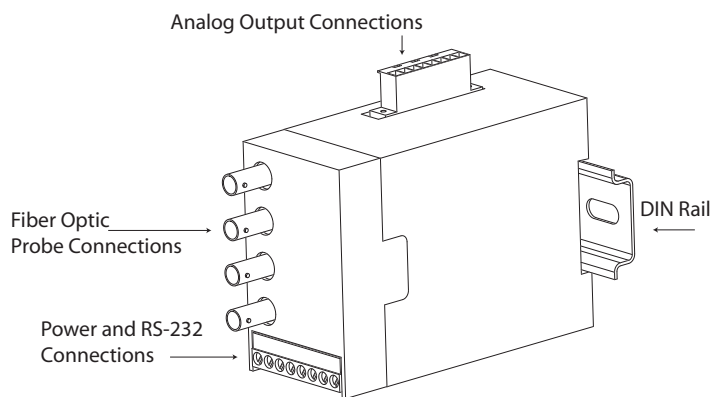
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Specifications

	3301	3302	3304
Channels	1	2	4
Measurement Rate	4Hz	2Hz	1Hz
Measurement Range	0 to 120°C		
Electrical Interference	Immune to MR, EMI, RF and Microwave		
Accuracy (Calibrated)	±0.5°C within 50° C of Calibration Point		
Repeatability (Precision)	0.5°C RMS @ 8 Samples per Measurement		
Output Resolution	RS-232C: 0.01°C; Analog Output: 0.01°C		
Output Format	Selectable °C, °F and °K		
Self Diagnostic	Self Diagnosis and Probe Errors Available on RS-232		
Input power	+5 VDC ±5%, 1.0A		
Serial Output	RS-232C		
Analog Output	0-10V DC		
Dimensions	74.7mm H x 44.7mm W x 104.3mm D		
Storage Temperature	-30°C to +75°C		
Operating Environment	0°C to 40°C, 80% RH (Max) Non-condensing		

Dimensions



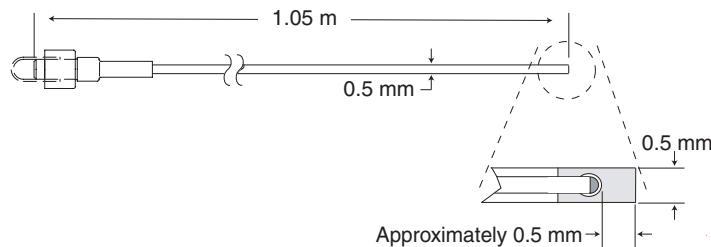
Available Options

- Metal Enclosure
- Universal 5V Medical Grade Power Supply (Input 85-264 VAC, 49-63 Hz)
- DIN Rail Segment for Mounting
- Connectors for Mating Wiring Harnesses

Standard Probe & Extension*

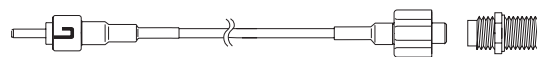
STB Probe

Temperature Range	0 to 120°C
Length	1 meter
Response Time	0.25 seconds in stirred liquid
Fiber Type	200 µm silica fiber with Tefzel® jacket
Color	Black
Connector Type	RPC-1 molded plastic



FOC-ST Extension (One extension per probe required)

Lengths	2, 5, and 10 meter
Fiber Type	400 µm silica fiber protected with Kevlar® and PVC
Color	Black
Connector Types	RPC-1 molded plastic to ST



* Custom probes are our specialty

Your local Luxtron representative is:

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