

Customized Fiber Optic Temperature Measurement for OEM Applications



Benefits

- Probes immune to Electro-magnetic Interference (EMI):
 - RF
 - MRI
 - Microwave
 - High Voltage
- Easily Integrate into OEM Equipment and Control Systems
- Customer-chosen Calibration
- Stable and Inert Sensor

Field Proven Fiber Optic Sensor

LumaSense Technologies' m600 Series of OEM thermometry instruments provide precise and repeatable in-situ temperature measurements for control of processes involving Electromagnetic Interference (EMI). The Luxtron m600 is ideal for semiconductor and thin film processing where temperature is a critical control parameter. Other applications include high-voltage equipment, industrial and medical microwave devices and RF equipment.

Easy Integration with Your Equipment

One, two and four channel versions of the m600 are offered in a compact DIN-rail module. Measuring only 75mm x 45mm x 105mm, the m600 offers both analog and digital outputs within the same enclosure. Packing all these features into a small form-factor makes the m600 easy for OEMs to integrate into their equipment.

Customized Probe Configurations

Non-metallic and electrically non-conductive, the unique m600 probes are immune to EMI and voltages that adversely affect conventional sensors, such as thermocouples, RTDs and thermistors. By using materials of minimal thermal conductance, these probes measure temperature on minute samples without perturbing or heat sinking the sample. LumaSense Technologies offers its diverse industrial and process experience to develop custom probes for specific OEM applications.

With more than 25 years of experience and thousands of systems installed worldwide, LumaSense Technologies is the proven provider in the fiber optic thermometry industry.

Applications

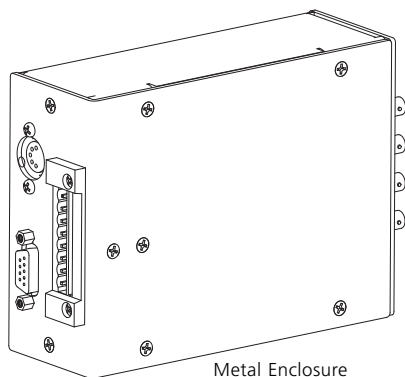
- Temperature Control of Electrostatic Chucks
- Temperature Monitoring and Control of Dielectric (RF and Microwave) Heating Processes
- Monitoring of Semiconductor Wafer Temperatures during RF and Plasma Applications
- Heating Control of Microwave Processes
- Temperature Monitoring and Electrical Isolation of Critical Military Facilities and Equipment

Luxtron m600 Temperature Monitor

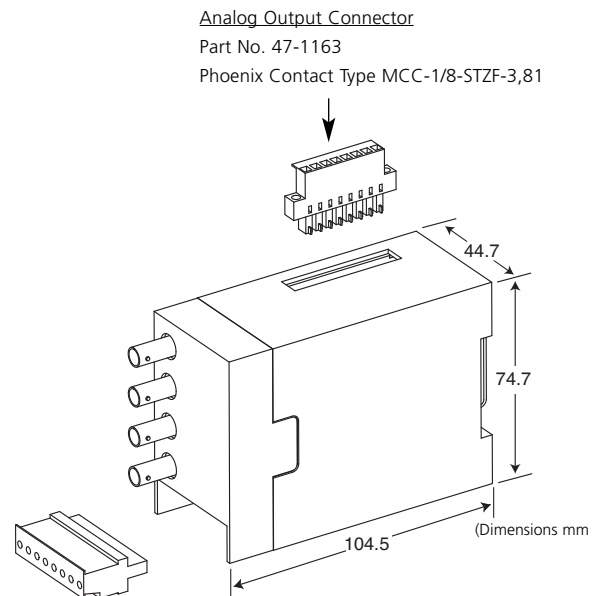
Specifications	m601	m602	m604
Channels	1	2	4
Maximum Per Channel Measurement Rate	4Hz	2Hz	1Hz
Measurement Range	-100 to 330°C		
Electrical Interference	Probes Immune to EMI, RF and microwave		
Accuracy (Calibrated)	±0.5°C within 50°C of Calibration Temp, ±0.2°C within 20°C of Calibration Temp		
Repeatability (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 versions	+5VDC ±5% @ 1.5 A, or +24VDC ±5% @ 300mA		
Serial Output	RS-232C		
Analog Output	0 to 10V or 4 to 20mA		
Dimensions	74.7mm H x 44.7mm W x 104.5mm D		
Storage Temperature	-30 to +75°C		
Operating Environment	10°C to 50°C, 80% RH (Max) Non-condensing		

Available Accessories

Description	Part Number
Metal Enclosure for Electromagnetic Shielding	01-13672-01 (1 ch) 01-13672-02 (2 ch) 01-13672-04 (4 ch)
Mating Connector for Power Input and RS-232	47-1060-08
Mating Connector for Analog Outputs	47-1163
Wiring Pins for Mating Analog Output Connector	47-1162
DIN Rail Segment for Mounting	90-2176
Universal Switching Power Supply for 24V Version	50-1307



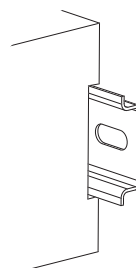
Metal Enclosure
Part No. 01-13672-04 (4 channel)



Analog Output Connector
Part No. 47-1163
Phoenix Contact Type MCC-1/8-STZF-3,81

Power and RS-232 Connector
Part No. 47-1060-08
Phoenix Contact Type MVSTBW 2,5/8-ST-5,08

DIN Rail
Part No. 90-2176



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