

PhotriX™

Ultra Fast Pyrometer for Demanding Industrial Processes

The PhotriX™ Pyrometer from Luxtron offers the most precise non-contact measurements for industrial environments requiring closed loop control of thermal processes. Targeted at applications involving rapid thermal ramps, assembly lines with fast-moving targets, and applications with very small targets the PhotriX™ offers unparalleled precision at ultra high speeds.

Superior Performance

Temperature measurements in many industrial-heating applications require repeatability as well as high resolution. The PhotriX™ system offers unmatched precision and speed made possible by its superior signal-to-noise ratio (SNR). The higher sampling speed (up to 1kHz) enables faster ramp rates of processes leading to higher throughput. The innovative design of the PhotriX™ also makes it exceptionally stable for long process cycles and its repeatable performance ensures consistent product quality.

Advanced Materials Processing

- Crystal Growth
- Semiconductor Processing
- Flat Panel Production
- Deposition and Etch

Industrial Heating

- Optical Fiber Drawing
- Vacuum Furnaces
- Induction Heating
- Annealing
- Ovens

Chemical / Petrochemical

- Incinerators
- Refractory Ovens
- Turbines

Minute Spot Size

The best-in-class SNR of the PhotriX™ allows it to make precise measurements while viewing very small spot sizes on the target material --as small as 1 millimeter. This unique feature combined with PhotriX's high speed offers unmatched spatial resolution of measurements for very small targets (e.g., filaments, wire, etc.) and targets with obstructed views.

Production Proven

Packaged in a rugged and compact enclosure, the PhotriX™ system is designed for convenient integration into industrial equipment and processes. The sensor is protected in a stainless steel housing that is easily mounted using the incorporated threaded body.



PhotriX™

Specifications

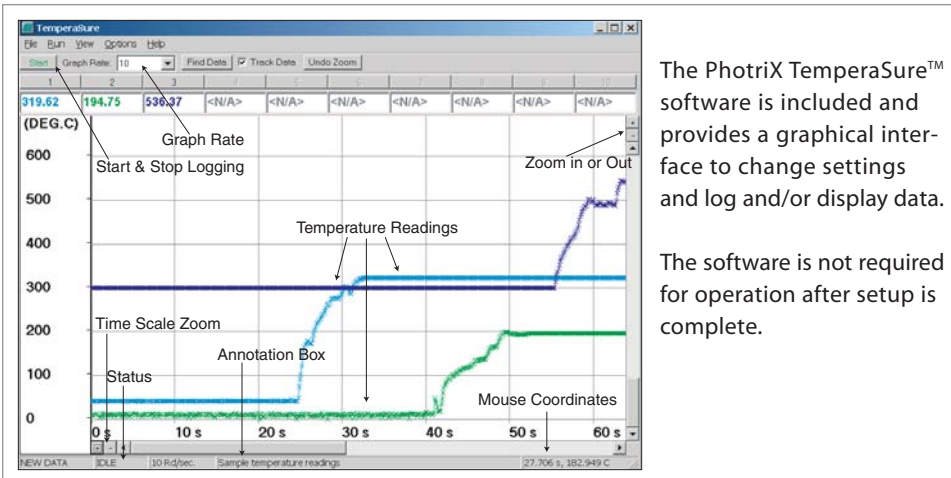
Temperature Range	Standard Spot	Mini-Spot
Minimum	65 °C	125 °C
Maximum	1100 °C	2800 °C
Wavelength	700 - 1650 nm	
Resolution	0.01 °C Above 150 °C	
Accuracy	± 1.5 °C or 0.15 % of Reading	
Speed	Up to 1 kHz	
Repeatability	< 0.15 °C per Year Drift	
Output	RS-232 (Standard); Analog Output (Optional)	
Ambient Range	10-60 °C	
Dimensions	35.0 mm Diameter, 165 mm Length	
Power	Universal Power Supply (also accepts 12VDC)	

Standard system includes

- Sensor Electronics with Anti-reflective Coated Lens
- PhotriX™ Communication Interface Module (CIM)
- Software for PC that Performs Data Acquisition, Graphing and Setup Interface
- 4m Cable to Connect CIM to Sensor
- 3m RS-232 Interface Cable to Connect CIM to PC
- Universal Power Supply
- Calibration Certificates
- Manual

Available Accessories

- Multi-channel PC Interface
- Carrying Case
- Analog Output Module (0-10V or 4-20mA)

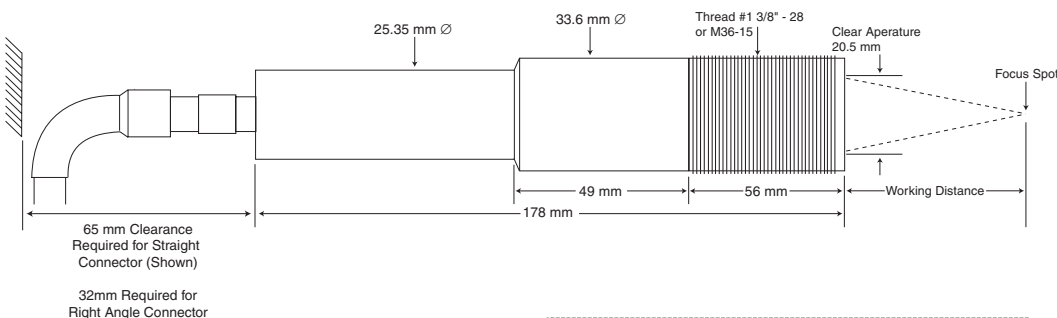


Target Materials

The wavelengths that the PhotriX™ operates at are suitable for the following targets:

- Metals
- Metal Oxides
- Ceramics
- SiO₂
- SiC
- Graphite

Sensor Dimensions



Working Distance*	Standard Spot Size (dia.)	Mini Spot Size (dia.)
75 mm	2.0 mm	1.0 mm
150 mm	3.8 mm	1.5 mm
300 mm	7.5 mm	2.5 mm
500 mm	12.5 mm	3.5 mm
1000 mm	25.0 mm	8.0 mm

* Custom working distances available for surcharge

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