

TEMPERATURE MEASUREMENT PRODUCT REVIEW



THE PYROMETER INSTRUMENT COMPANY, INC.

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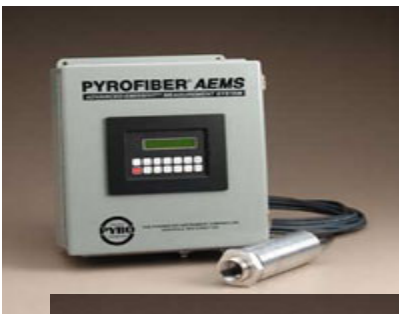
Worldwide Leader In Precision Temperature Measurement Technology Since 1928

Non-Contact Instruments



PYROLASER®

- Portable, High Temperature Infrared Thermometer
- Automatically Measures Emissivity for Temperature Measurement Accuracy to $\pm 5^\circ\text{F}$ ($\pm 3^\circ\text{C}$) over entire temperature range
- Temperature Range Models from 1100°F to 5400°F (600°C to 3000°C)
- Selectable Data Acquisition Rates
- Built in features include Background radiation Compensation, Data Notebook holds 700 readings, PC Interface, Analog & Digital Outputs



PYROFIBER® LAB

- Research & Development Laboratory Infrared Thermometer
- Custom Temperature range models available 1100°F to 5400°F (600°C to 3000°C)
- Automatically measures Emissivity for Temperature Measurement Accuracy to $\pm 5^\circ\text{F}$ ($\pm 3^\circ\text{C}$) over temperature range
- Data Acquisition 1ms to 2000ms
- Built in PC Interface for Data Collections, Analog & Digital Outputs



OPTITHERM® III

- Infrared Thermometer for in-situ Semiconductor Wafer Temperature Control with Accuracy to $\pm 5^\circ\text{F}$ ($\pm 3^\circ\text{C}$)
- Monitor epitaxial growth rate and layer thickness
- Automatically Measures Rapidly Changing Emissivity During Layer Growth
- Custom Temperature range models available 480°F to 2700°F (250°C to 1500°C)
- Selectable Data Acquisition up to 70 readings/second
- PC Remote Control Interface, Analog & Digital Outputs

PYROFIBER® Industrial, PYROFIBER® II, E10

- Infrared Non Contact Thermometer for On-line Process Automation and Control demanding high accuracy to $\pm 5^\circ\text{F}$ ($\pm 3^\circ\text{C}$)
- Various models for Temperature Measurements from 480°F to 5400°F (250°C to 3000°C)
- Models feature Auto Emissivity compensation
- Selectable Data Acquisition rates
- Built in Process Control Analog & Digital Outputs



Pyro MicroTherm

- Measure Small Targets to $0.0005''$ (0.0127mm)
- Disappearing Filament Optical Pyrometer
- Temperature Range 1300°F to 8100°F (700°C to 4500°C)
- Digital Display with Adjustable Emissivity
- Accuracy $\pm 0.5\%$ of range
- Ideal for Wire drawing, Filament Lamp, cathodes

PYRO OPTICAL

- Optical Sensor Radiation Pyrometer Rugged Lightweight Portable
- Six Models Available
- Accuracy $\pm 0.5\%$ of Reading Single Double & Triple Temperature Ranges 1420°F to 5800°F (770°C to 3200°C)
- Target Sizes to $0.055''$ (1.4mm)
- Small Target Distance 12" to Infinity
- Ni-Cad Rechargeable Battery



Optical Calibration Test Set and Tungsten Filament Strip Lamps

- In House Optical Pyrometer Temperature Calibration System
- Temperature Range: 1400°F to 4200°F (800°C to 2300°C)
- Tungsten Filament Strip Lamps
- DC Digital Ammeter



Contact Instruments

DIGITAL 500 SURFACE and IMMERSION

- Digital readout ± 1 °F or °C
- Temperature ranges 0°F to 2500°F (0°C to 1400°C)
- Automatic cold end junction compensation
- Rechargeable
- Rigid or flexible extension arms
- 23 Industrial Interchangeable “K” type thermocouples for contact or immersion applications



ANALOG SURFACE

- Portable, easy to read scale
- 8 models available
- 0°F to 1200°F (0°C to 650°C) temperature range
- Automatic cold end junction compensation
- Rugged cast aluminum housing
- No Batteries Required
- 23 Industrial Interchangeable “J” type thermocouples and extension arms available



ANALOG IMMERSION

- Portable, easy to read scale
- 4 models available
- Temperature ranges 0°F to 2500°F (0°C to 1400°C)
- Automatic cold end junction compensation
- Rugged cast aluminum housing
- No Batteries Required
- Rigid or flexible extension arms available
- Interchangeable “K” type Thermocouples available



DIGITAL 250 CONTACT and IMMERSION

- Large LCD display
- 32°F to 2462°F (0°C to 1350°C) temperature range
- Rigid and flexible extension arms available
- Interchangeable “K” type thermocouples for contact or immersion available
- Records min and max temperatures
- Low cost



DIGITAL 250 Light Duty

- Features over 20 “K” type thermocouples to meet a many applications

Process & Machinery Automation

PROCESS CONTROL & PLANT AUTOMATION EQUIPMENT

- CONTROLLERS - Single, Multi-Loop, PID & PLC Controllers including Fieldbus Systems, CAN / CANopen, Profibus-DP, MODbus, RS 232, RS 485 and Ethernet interfaces
- Temperature Controllers specifically for Industrial Hot-Runners, Pulsed Burners Controls
- Digital Panel & Din Rail Indicators
- Pressure Transmitters
- Data Acquisition and Recorders.



Pyrometer Instrument Company is the leader in the development of precision temperature measurement instruments for science and industry and is the only domestic manufacturer of traditional optical photoscrenic wedge disappearing filament pyrometers.

Whether at a refractory furnace, industrial oven or in space research, measuring temperature without contacting the surface is vital to quality and yield, especially when those temperatures reach over 250°C. Pyrometer Instrument Company has spent more than 75 years developing and manufacturing instruments that make high-temperature measurement easier and more accurate.

Thousands of companies in hundreds of industries have chosen Pyrometer technology to solve their temperature measurement issues. Since 1928, serving industries such as

- semiconductor
- aerospace
- environmental
- asphalt
- automotive
- rubber
- calibration
- electrical
- defense
- paper
- metals and alloy
- ceramic
- textile
- plastic

The Pyrometer Instrument Company has been trusted for it's cost-effective and reliable solutions.



Winner of the Photonics Circle of Excellence



Local Factory Representative

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