

Digital 250 Immersion

THERMOCOUPLE PYROMETER

DIGITAL 250 LOW-COST PORTABLE DIRECT READING DIGITAL PYROMETER



FEATURES

- Large LCD Display reads in °F or °C
- Meter Accuracy: $\pm 0.3\%$ Reading
- Typical Error: $\pm 1.8^\circ\text{F}$ or $\pm 1.0^\circ\text{C}$
- Temperature Ranges: 32°F - 2462°F (0°C - 1350°C)
- Records Min/Max Temperatures
- Display Hold Button
- Cast Aluminum Enclosure
- Standard 9 Volt Battery
- Low Battery Warning Display
- Three Year Meter Warranty
- Rigid Extension Arm
- Interchangeable "K" Type Thermocouples Available

APPLICATIONS

The Pyro Digital 250 SDT141S-Immersion Pyrometer can accommodate a wide variety of thermocouple tips that are suited for many types industrial and commercial non-ferrous immersion applications.

- Foundries
- Castings
- Molten Copper
- Molten Tin
- Molten Brass
- Molten Bronze
- Molten Aluminum
- Molten Zinc

DESCRIPTION

The Pyro Digital 250 SDT141S-Immersion Pyrometer is a rugged, portable, easy-to-read thermocouple pyrometer that utilizes interchangeable, reusable thermocouple tips on immersion temperature measurement applications. Instrument temperature display accuracy to $\pm 0.3\%$ of reading. The Digital 250 pyrometer meter comes complete in a durable aluminum housing and is ready to use with a wide variety of thermocouples. The extension arm is constructed of $5/8$ " chrome plated brass tubing and is 32" long for taking high temperature measurements at a safe distance.

OPERATION

The Pyro Digital 250 Series Model SDT141S-Immersion pyrometer is easy to operate from the front keypad. Simply install the appropriate thermocouple, select from the keypad input type K thermocouple, select temperature °F or °C and select display resolution $1/10^\circ$ or 1° , and you are ready to measure the process temperature. In addition, if you wish to check temperature variations over a period of time, the SDT141S has a record feature where you can also view the minimum or maximum temperatures on the meter's display.

- Simplicity of Operation
- Complete Line of Interchangeable Arms and Thermocouples
- Durability/Ruggedness
- Min/Max and Actual Temperature



The Pyrometer Instrument Company, Inc. • 92 North Main Street, Bldg 18D • Windsor, NJ 08561 • USA
Telephone: (609) 443-5522 • Fax: (609) 443-5590 • e-mail: sales@pyrometer.com
Visit Our Website: www.pyrometer.com

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SPECIFICATIONS

Selectable Readout & Resolution:	°F or °C (1/10° from 0 - 999.9° or 1° over 1000°)
Temperature Range:	32°F - 2462°F (0-1350°C)
Accuracy:	±0.3% of Temperature Displayed, typical ±1.8°F or ±1.0°C
Ambient Temperature Range:	40°F to 120°F (5°C - 50°C)
Digital Display:	4 Digits - Characters 1/2" High LCD
Cold Junction Compensation:	Automatic
Power:	9.0 Volt Alkaline Battery, 100 Hours Continuous Operation

CALIBRATION

- The Pyro SDT141S-Immersion Pyrometer comes complete factory calibrated traceable to NIST Standards.
- Optional "Certificate of Calibration" per point to NIST Standards can also be provided.
- Expert factory service is also available for periodic calibration or maintenance.

OPTIONAL ACCESSORIES

Interchangeable "K" Style Thermocouples & Support Bracket are shown below.

INTERCHANGEABLE IMMERSION TYPE EXTENSION ARMS

The Pyro Model SDT141S extension arm is an industrial grade and constructed from rugged 5/8" diameter brass tubes with protective chrome plating. The extension arm also incorporates a saw tooth knuckle adjustable angle near the thermocouple connector. This angle can be adjusted in increments up to a 90° angle for immersion temperature measurements. The standard overall length of the extension arm is 32 inches. Custom lengths or extension arms are available up request, consult factory.



PRODUCT INFORMATION

When ordering specify the Pyro Digital 250 Model SDT141S-Immersion Pyrometer and the required thermocouples from below to meet your applications.

WARRANTY

Good performance and reliability are what you expect when you buy precision products from The Pyrometer Instrument Company, Inc. The Pyro Digital 250 SDT141S-Immersion Pyrometer comes complete with a three-year factory warranty on the electronic meter and a one-year factory warranty on all hardware items. For complete details see our Product Warranty Page.

INTERCHANGEABLE "K" IMMERSION TYPE THERMOCOUPLES

Pyro offers a wide range of industrial thermocouple styles to meet your applications. Pyro's many styles of immersion thermocouples allow for measurement of many non-ferrous molten materials. Pyro thermocouples attach securely into the Pyro Digital 250 SDT141S-Immersion Pyrometer extension arms. All Pyro immersion thermocouples are interchangeable. Connections are keyed to ensure correct attachment. Custom thermocouples are available upon request, consult factory.

Accuracy on "K" Style Thermocouples
500°F - 2500°F ±3/4%

Model T-11

Closed End, Bare Wire, Welded Tip
16 & 22 Gauge Wire
Overall Length 18"
Maximum Temperature 1450°F (788°C)
Response Time 7-10 seconds



Model T-12

Closed End, Bare Wire, Welded Tip
16 & 22 Gauge Wire
Overall Length 24"
Maximum Temperature 1450°F (788°C)
Response Time 7-10 seconds



Model T-14

Open End, Bare Wire Tip
16 & 22 Gauge Wire
Overall Length 24"
Maximum Temperature 1450°F (788°C)
Response Time 7-10 seconds



Model T-16

Type 446 SS Protective Tube, & Dia.
Immersion Length 8"
Overall Length 21"
Maximum Temperature 2500°F (1400°C)
Response Time 7-10 seconds



Model T-18

Type 446 SS Protective Tube, & Dia.
Immersion Length 12"
Overall Length 25"
Maximum Temperature 2500°F (1400°C)
Response Time 7-10 seconds



Model SP-SPT Thermocouple Support Bracket

(for above Model T-16 & T-18)

The Model SP-SPT Thermocouple Support Bracket assists in preventing the protected tube style thermocouple's 1/2" thick ceramic base from breaking should the operator bang the thermocouple against the crucible.

Note: For removing slag a stiff wire brush is recommended for this procedure.



PYRO'S AUTHORIZED REPRESENTATIVE: