Digital 250 Light Duty

THERMOCOUPLE PYROMETER

DIGITAL 250 LOW-COST PORTABLE DIRECT READING PYROMETER

FEATURES

- Large LCD Display reads in °F or °C
- Meter Accuracy: ±0.3% Reading
- Typical Error: ±1.8°F or ±1.0°C
- Temperature Ranges: 32°F - 2462°F (0°C - 1350°C)
- Records Min/Max Temperatures
- Display Hold Button
- Meter Housed in Molded Rubber Boot
- Standard 9 Volt Battery
- Low Battery Warning Display
- Three Year Meter Warranty
- Selectable J & K Input Thermocouples
- Complete Line of Interchangeable “J” & “K” Type Thermocouples

APPLICATIONS

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

- Lab
- HVAC
- Plastic & Rubber
- Weld Temps
- Heat Treating
- Oven Chambers
- Steam Traps
- Dies & Molds
- Engine Heads
- Brake Drums
- Bars & Sheets
- Oil Baths

DESCRIPTION

The Pyro Digital 250 Series Model SDT141S-LTDuty Pyrometer is a low-cost, light-duty, digital pyrometer. The handheld case is made from durable plastic, which is enclosed by a shock resistant rubber boot with a flip-out rear bracket for stand-up viewing. The thermocouple-input jack is a standard mini flat pin connector for easy thermocouple interchangeability. The SDT141S-LTDuty accepts either J or K thermocouple inputs. Instrument accuracy is ±0.3% reading. There is a choice of 20 different thermocouples to meet most process measurement applications.

OPERATION

The Pyro Digital 250 Series Model SDT141S-LTDuty pyrometer is easy to operate from the front keypad. Simply install the appropriate thermocouple, select from the keypad input type J or K thermocouple, select temperature °F or °C and select display resolution 1/10° 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 Thermocouples
- Durability/Ruggedness
- Min/Max and Actual Temperature
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SPECIFICATIONS

- Selectable Readout & Resolution:  °F or °C (1/10° from 0 - 999.9° or 1° over 1000°)
- Temperature Range:
  - Type K: 32°F - 2462°F (0-1350°C)
  - Type J: 32°F - 1832°F (0-1000°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-LTDuty 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.

PRODUCT INFORMATION

When ordering specify the Pyro Digital 250 Model SDT141S-LTDuty Pyrometer and the required interchangeable Extension Arms and 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-LTDuty Pyrometer comes complete with a three-year factory warranty on the electronic meter and a one-year warranty on all hardware items. For complete details see our Product Warranty Page.

ACCESSORIES

Interchangeable “J” & “K” Style Thermocouples are shown below.

INTERCHANGEABLE “J” & “K” CONTACT TYPE THERMOCOUPLES

Pyro offers a wide range of industrial and commercial thermocouple styles to meet your applications. Pyro’s many styles of contact thermocouples allow for contact measurement of flat, molds, hot plates, insertion, air or oven temperatures and semi-fluid materials. Each thermocouple model number is prefixed with either J or K to indicate thermocouple type. Special purpose thermocouples are available for immersion in liquids, gases, or for measuring air temperature. All thermocouples include handle and 4-foot coiled cable and mini connector to push securely into the Pyro Digital 250 SDT141S-LTDuty meter. All Pyro contact thermocouples are interchangeable. Custom thermocouples are available upon request, consult factory.

**Accuracy on Surface Thermocouples**

<table>
<thead>
<tr>
<th>Type</th>
<th>Range</th>
<th>±</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>32°F - 530°F</td>
<td>±4°F</td>
</tr>
<tr>
<td></td>
<td>530°F - 2462°F</td>
<td>±3/4%</td>
</tr>
<tr>
<td>J</td>
<td>32°F - 530°F</td>
<td>±4°F</td>
</tr>
<tr>
<td></td>
<td>530°F - 1832°F</td>
<td>±3/4%</td>
</tr>
</tbody>
</table>

Model J-STP130, Needle

Insertion Applications

- 8” Conical Tip Insertion Probe
- Maximum Temperature 1562°F (850°C)
- Response Time 6 seconds

Model J-STP147, Surface

Contact Applications

- 8” Spring Loaded Tip Surface Probe
- Maximum Temperature 950°F (510°C)
- Response Time 6 seconds

Model J-STP148, Surface

Contact Applications

- 90° Angle Spring Load Tip Surface Probe
- Maximum Temperature 950°F (510°C)
- Response Time 6 seconds
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**Model J-STP149, Air**
Air Temperature Applications
8" Exposed Tip Air Probe
Maximum Temperature 500°F (260°C)
Response Time 4.5 seconds

**Model J-STP154, Needle**
Insertion Applications
6" Heavy Duty Conical Tip Insertion Probe
Maximum Temperature 1562°F (850°C)
Response Time 6 seconds

**Model J-STP166, Needle**
Insertion Applications
4" Heavy Duty Conical Tip Insertion Probe
Maximum Temperature 1562°F (850°C)
Response Time 6 seconds

**Model K-SAK12M, Chisel**
Insertion Applications
11.8" Chisel Tip insertion Probe
Maximum Temperature 482°F (250°C)
Response Time 4 seconds

**Model K-SAK13M, Needle**
Insertion Applications
3.5" Conical Tip Insertion Probe
Maximum Temperature 482°F (250°C)
Response Time 4 seconds

**Model K-SAK21M, Chisel**
Insertion Applications
3.7" Heavy Duty Chisel Tip Insertion Probe
Maximum Temperature 482°F (250°C)
Response Time 2 seconds

**Model K-SBK11M, Surface**
Contact Applications
4" Heavy Duty Spring Loaded Tip Surface Probe
Maximum Temperature 482°F (250°C)
Response Time 0.2 seconds

**Model K-SBK12M, Surface**
Contact Applications
2.8" Heavy Duty 90° Angle Spring Loaded Tip Surface Probe
Maximum Temperature 482°F (250°C)
Response Time 0.4 seconds

**Model K-SBK14M, Surface**
Contact Applications
Heavy Duty 90° Angle Spring Loaded Tip Surface Probe
Maximum Temperature 482°F (250°C)
Response Time 0.4 seconds

**Model K-SBK17M, Surface**
Contact Applications
Heavy Duty 45° Angle Spring Loaded Tip Probe
Maximum Temperature 482°F (250°C)
Response Time 0.4 seconds
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<thead>
<tr>
<th>Model K-STA16, Surface</th>
<th>Contact Applications</th>
<th>8&quot; Spring Loaded Tip Surface Probe</th>
<th>Maximum Temperature 950°F (510°C)</th>
<th>Response Time 6 seconds</th>
</tr>
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<table>
<thead>
<tr>
<th>Model K-STA17, Surface</th>
<th>Contact Applications</th>
<th>90° Angle Spring Loaded Tip Surface Probe</th>
<th>Maximum Temperature 950°F (510°C)</th>
<th>Response Time 6 seconds</th>
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<tr>
<th>Model K-STA13, Air</th>
<th>Air Temperature Applications</th>
<th>8&quot; Exposed Tip Air Probe</th>
<th>Maximum Temperature 950°F (510°C)</th>
<th>Response Time 4.5 seconds</th>
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<tr>
<th>Model K-STA150, Insertion</th>
<th>Insertion Applications</th>
<th>8&quot; Conical Tip Insertion Probe</th>
<th>Maximum Temperature 1562°F (850°C)</th>
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<tr>
<th>Model K-STA160, Air</th>
<th>Air Temperature Applications</th>
<th>4&quot; Heavy Duty Exposed Tip Air Probe</th>
<th>Maximum Temperature 950°F (510°C)</th>
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<th>Model K-STA161, Insertion</th>
<th>Insertion Applications</th>
<th>1Heavy Duty Conical Tip Insertion Probe</th>
<th>Maximum Temperature 950°F (510°C)</th>
<th>Response Time 6 seconds</th>
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<tr>
<th>Model K-STA162, Surface</th>
<th>Contact Applications</th>
<th>4&quot; Heavy Duty Spring Loaded Tip Surface Probe</th>
<th>Maximum Temperature 950°F (510°C)</th>
<th>Response Time 6 seconds</th>
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