NEW! Digi-Stem® DST400 Thermometer
Choose from 5 Thermocouple Inputs

Wahl’s NEW! DST400 is the newest addition to Wahl’s expanding family of DST Digital Thermometers. They are wide range, high accuracy thermometers designed for many applications where accurate and reliable temperature monitoring is important.

Featuring the same reliable and rugged Wahl Digi-Stem® brand thermometer construction, these new updated thermocouple versions join the popular RTD versions. They offer a choice of one of 5 user specified thermocouple input types - K, J, T, E or S.

Select any of the 5 factory programmed Thermocouple inputs at time of purchase, and change to any of the other 4 inputs after purchase with our easy to use optional DSTCAL software*. Interchangeable stickers are provided to indicate which thermocouple type is programmed at any given time.

DSTCAL Software allows the following functions:

- **Set Thermocouple Type** - Programs meter for use with J, K, T, E or S type thermocouples. One meter - 5 options!
- **Meter Calibration** - Calibrates mV measurements of the meter.
- **Cold Junction Compensation Calibration** - Calibrates CJC sensor for increased accuracy.
- **Set Sample/Display Rate** - Optimizes sample rate to match your process speed and maximize battery life.
- **Tamper Resistance** - DSTCAL software is required for all temperature adjustments, providing added security.

The Wahl DST400 can be used with a wide selection of thermocouple probes from Wahl, and is compatible with third party thermocouple probes with a ½” NPT instrument fitting.

NEMA-4X Stainless Housing withstands use in industrial process monitoring applications, indoors or out, including food, beverage, pharmaceutical, petro-chemical and tire & rubber.

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Models and Ranges available:

- **DST400K** - Type K Thermocouple, -40° to 2500°F (-40° to 1371°C)
- **DST400J** - Type J Thermocouple, -40° to 2192°F (-40° to 1200°C)
- **DST400T** - Type T Thermocouple, -40° to 752°F (-40° to 400°C)
- **DST400E** - Type E Thermocouple, -40° to 1832°F (-40° to 1000°C)
- **DST400S** - Type S Thermocouple, 32° to 3200°F (0° to 1760°C)

**DST400 Meter Features**

- Large 1” Digit LCD Display, readable from 30 Feet
- Meter Accuracy from ±0.5°F (±0.3°C)
- User Selectable °F or °C
- Quick Response - as fast as .25 second update rate
- Long-Life, Lithium Battery with 4 years life at 2 second sample rate, up to 10 years at 10 second rate
- Ambient operation from -40°F to 158°F (-40° to 70°C)
- NEMA-4X Stainless Housing
- Vibration Tolerant
- Rigid, Remote, or Adjustable Angle Probe connections to allow mounting choices for easy reading

**Warranty**

2 YEAR WARRANTY

Contact Us:

(800) 421-2853 • FAX (828) 658-0728 • www.palmerwahl.com

*Requires recalibration of Cold Junction Compensation with a Thermocouple Calibrator.
DST400 Series Meter Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>DST400K</th>
<th>DST400J</th>
<th>DST400T</th>
<th>DST400E</th>
<th>DST400S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Range</strong></td>
<td>°F or °C Switchable</td>
<td>°F or °C Switchable</td>
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</tr>
<tr>
<td>-40° to 2500°F</td>
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<td>-40° to 1371°C</td>
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<td>°F or °C Switchable</td>
</tr>
<tr>
<td><strong>Meter Accuracy</strong></td>
<td>Tamb = 23°C ±5°C (includes CJC error)</td>
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</tr>
<tr>
<td>&lt; 1000 = ± 0.5°F, ± 0.3°C</td>
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<td>± 0.5°F, ± 0.3°C</td>
<td>&lt; 1000 = ± 0.5°F, ± 0.3°C</td>
<td>Full Range = ± 2°F, ± 1°C</td>
<td></td>
</tr>
<tr>
<td>&gt; 1000 = ± 2°F, ± 1°C</td>
<td>&gt; 1000 = ± 2°F, ± 1°C</td>
<td>&gt; 1000 = ± 2°F, ± 1°C</td>
<td>&gt; 1000 = ± 2°F, ± 1°C</td>
<td>Full Range = ± 2°F, ± 1°C</td>
<td></td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>1.0” 4-digit display with icons for °F, °C, and low battery.</td>
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</tr>
<tr>
<td><strong>Display Resolution</strong></td>
<td>&lt; 1000 = 0.1°; &gt; 1000 = 1°</td>
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<td>&lt; 1000 = 0.1°; &gt; 1000 = 1°</td>
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</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>10 to 100% RH, non-condensing</td>
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</tr>
<tr>
<td><strong>Ambient Operating Temperature</strong></td>
<td>-40° to 158°F (-40° to 70°C)</td>
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</tr>
<tr>
<td><strong>Ambient Temperature Coefficient</strong></td>
<td>Input: &lt; 200°C, Maximum of: ± 0.02°C/°C</td>
<td>Input: &lt; 200°C, Maximum of: ± 0.02°C/°C</td>
<td>Input: &gt; 200°C, Maximum of: ± 0.05°C/°C</td>
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<tr>
<td><strong>Sensor Lead Resistance</strong></td>
<td>1000 ohms Maximum</td>
<td>1000 ohms Maximum</td>
<td>1000 ohms Maximum</td>
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<td>1000 ohms Maximum</td>
</tr>
<tr>
<td><strong>Battery Power</strong></td>
<td>1 - C size, Lithium Thionyl Chloride, 3.6V</td>
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<tr>
<td><strong>Sample/Display Rate</strong></td>
<td>2 Seconds, adjustable in .25 Second intervals to 25 to 10 seconds with software</td>
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<tr>
<td><strong>Battery Life</strong></td>
<td>&gt; 4 Years at 2-second sample rate, 1 to &gt;10 years (approximate) when set to .25 to 10 second sample/display rate</td>
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<tr>
<td><em><em>“I” Models</em> Battery Power</em>*</td>
<td>1 - AA size, Lithium Thionyl Chloride, 3.6V</td>
<td>1 - AA size, Lithium Thionyl Chloride, 3.6V</td>
<td>1 - AA size, Lithium Thionyl Chloride, 3.6V</td>
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<td>1 - AA size, Lithium Thionyl Chloride, 3.6V</td>
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<tr>
<td><strong>Sample/Display Rate</strong></td>
<td>4 Seconds, adjustable in .25 Second intervals from .25 to 10 seconds sample display rate with software</td>
<td>4 Seconds, adjustable in .25 Second intervals from .25 to 10 seconds sample display rate with software</td>
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<td><strong>Battery Life</strong></td>
<td>2 Years at 4-second sample rate, 0.5 to &gt; 3 years (approximate) when set to .25 to 10 second sample display rate with software</td>
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<tr>
<td><strong>Housing</strong></td>
<td>Stainless Steel and Polycarbonate, Rating NEMA 4-X. Dimensions: 5.3”W x 4.3”H x 2.7”D (13.5 x 10.9 x 6.9 cm); Weight: 2 lbs. (1kg)</td>
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<td><strong>Options</strong></td>
<td>NIST Traceable Certificate of Conformance</td>
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* DST Meters come standard with a “C” cell battery, ready for ground shipment in the contiguous 48 states and some areas of Canada. For air shipments, either an “I” model with a “AA” battery, or “NB” model with no battery, is required to avoid additional charges in compliance with transportation regulations regarding “C” cell lithium metal batteries. Specify on order form.

**Specifications subject to change without notice**

### Process Connection Options

**Sanitary Fitting, Process Connection:** Authorized 3-A Sanitary Standard 74-06 Tri-clamp® flanged fittings to fit 1.5” to 3.0” diameter tube sizes for milk, food and pharmaceutical processing.

**Spring Loaded Stem**: Maintains a positive force against the bottom of thermowells. Not for direct immersion in fluids; connection is not pressure tight. Allows approximately 1 inch of spring compression travel.

**Transition Fitting, Process Connection:** Unthreaded transition fitting for hand held operation, or use in open vessels with no thread.

**Welded Fitting**: Sealed for immersion in fluids, sanitary, and high-pressure applications.

**Cutaway View**

Probes are sold separately and can be configured to fit your specific application. See the ordering guide to build your complete DST400 System.

**For help with ordering, or for available Probes and Thermowells, please contact us at 1-800-421-2853**

### Note:

Some connections include 1/2” of threads when measuring probe length. Contact Customer Service for information.

**Calibration Services Available**

Digital version of catalog may differ from printed version.