392A High Performance Platinum RTD Thermometer System

Exceptional Accuracy and Long-Term Stability in a Versatile Meter System with Interchangeable Probes

• 392AHPF Meter Range: -290°F to 1450°F
• 392AHPC Meter Range: -180°C to 788°C
• 392AHPD Dual Scale Meter Range: -290°F to 1450°F (-180°C to 788°C)
• Meter Accuracy ±0.1°F/C at 32°F (0°C)
• System Accuracy ±0.25% of reading (392AHP Meter & 202HP Immersion Probe)
• Complete tracing of the platinum standard DIN 43760 to 0.1°F conformity over the entire temperature range
• Readings updated 2.5 times per second
• Bright 0.33” high-visibility LED display
• Maxi-Temp® holds peak temperature reading
• Tough, drop tested meter assembly
• Interchangeable, 4-wire snap-in connection HP Series probes
• Automatic compensation for probe calibration of temperature at ice point and alpha
• Noise suppression circuit
• NIST traceable conforming to ITS-90

Wahl invented the portable Platinum-RTD Thermometer (Pat. No. 4,050,309) to provide exceptional accuracy and conformity in laboratory and industrial applications. The 392AHP Meter/Probe System represents the ultimate in Heat-Prober System Performance.

Thousands of 392AHP Heat-Probers are used by various industries, making critical temperature measurements as well as calibrating sensors and other instruments.

Use the 392AHP system to calibrate installed sensors, to make quality assurance tests and to make highly accurate process temperature measurements. An internal feedback loop maintains system calibration during use. And you can order additional HP probes at any time without calibration.

The 392AHP features a special noise rejection program for use near high EMF machines.

See pages 6-7 for complete meter specifications, options, accessories, and money saving kits.

See pages 8-9 for Platinum RTD Probe listings.

Applications

- Petrochemical
- Food
- Photographic
- Aerospace
- Electronics
- Nuclear Power

5-Point NIST Traceable RTD Calibrators

Assures System Reliability Before Every Measurement

CAL392HP-HT High Temperature Calibrator for 392HP only, NIST Certificate optional.
Calibration Points: -58°F, 32°F, 212°F, 284°F, 752°F
-50°C, 0°C, 100°C, 140°C, 400°C

CAL392HP-LT Low Temperature Calibrator for 392HP only
Ice Point to Boil
Calibration Points: 32°F, 68°F, 104°F, 140°F, 212°F
0°C, 20°C, 40°C, 60°C, 100°C

10786-NIST Certificate of NIST Traceability with Test Data.

To request Custom Calibrators with special calibration points, please contact Customer Service.
392A Series Platinum RTD Thermometer Systems

392 Precision Systems Offer Wide Temperature Range and Meter Options

- **392AMF Meter** Range -60° to 752°F
- **392AMC Meter** Range -51.1° to 400°C
- **392AMD Dual Scale Meter** Range -60° to 752°F (-51.1° to 400°C)
- Meter options for display type and power source
- Meter accuracy of ±0.1°F/C ±1 digit at 32°F (0°C)
- System accuracy ± 0.5% of reading (392A Meter & 202 Immersion Probe)
- Large LED or LCD display for indoor or outdoor readings
- Interchangeable Platinum RTD probes
- Peak Hold and Auto-Ranging display features.
- Interchangeable probes compensated for calibration at ice point
- NIST traceable conforming to ITS-90

A precision, microprocessor driven meter is the heart of a complete, portable and rugged Heat-Prober temperature measurement system. Using 392A Meters, engineers in maintenance, quality assurance, energy conservation and process control can now have laboratory accuracy anywhere in the plant, laboratory, or field.

The 392A system gives you outstanding accuracy with a choice of interchangeable probes for measuring surfaces, liquids, semi-solids and gases. Interchangeable 3-wire, snap-in connection Platinum-RTD probes are shown on pages 8 and 9. In addition, 392A Meter/Probe Systems are ideal for use as an in-house calibration standard for less accurate thermometers and to calibrate installed thermowells.

For complete portability and ease of use, Wahl Heat-Prober Meters are battery powered. The 392A Series are supplied with rechargeable batteries that allow 8 hours continuous operation. The supplied recharger allows these meters to be used as a continuously operating bench unit. For field backup, a spare rechargeable battery pack (page 6) may be purchased.

### 5-Point NIST Traceable RTD Calibrators

All 392A Series Meters assure laboratory accuracy in the field when used in conjunction with the NIST traceable Calibrator CAL392.

**Assures System Reliability Before Every Measurement**

**CAL392-HT** High Temperature Calibrator

Calibration Points:
- -58°F, 32°F, 212°F, 284°F, 752°F
- -50°C, 0°C, 100°C, 140°C, 400°C

**CAL392-LT** Low Temperature Calibrator

Calibration Points:
- 32°F, 68°F, 104°F, 140°F, 212°F
- 0°C, 20°C, 40°C, 60°C, 100°C

NIST Certificate optional

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*Model 392AM features a bright .33" high red LED display for normal to low lighting conditions. It operates on a rechargeable NiCad battery pack. Includes battery recharger and AC line adapter.*

*Model 392AMX features a 0.4" high red LCD for normal to bright lighting conditions and operates on a rechargeable NiCad battery pack. Includes battery recharger and AC line adapter.*

*Model 392AVX features a .4" high red LCD for normal to bright lighting conditions and is powered by a 9-volt alkaline battery for 8 hours continuous use making it an excellent choice for field tests.*

Use F, C, or D Model No. suffix to designate Fahrenheit, Celsius, or Dual Range °F/°C Switchable.

See pages 6-7 for complete meter specifications, options, accessories, and money saving kits.

See pages 8-9 for Platinum RTD Probe listings.
## RTD Meter Specifications

### 392A Series RTD Meter Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>392AHP</th>
<th>392AM</th>
<th>392AM-S</th>
<th>392AVX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td>392AHP</td>
<td>392AM</td>
<td>392AM-S</td>
<td>392AVX</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>-290° to 1450°F</td>
<td>-60° to 752°F</td>
<td>-60° to 752°F</td>
<td>-60° to 752°F</td>
</tr>
<tr>
<td><strong>Digital Display</strong></td>
<td>Bright 0.33” LED</td>
<td>Bright 0.33” high LED</td>
<td>Discontinued</td>
<td>Red, 0.4” high LCD</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>0.1° below 375°F (190°C). Auto Ranges to 1° above 375°F (190°C).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Meter Accuracy at 77°F</strong></td>
<td>±0.1°F/C ±1 digit at 32°F (0°C)</td>
<td></td>
<td></td>
<td>±0.1°F/C ±1 digit at ice point, ±0.25% reading thereafter</td>
</tr>
<tr>
<td><strong>System Accuracy</strong></td>
<td></td>
<td></td>
<td></td>
<td>±0.3°F at ice point, ±0.5% reading thereafter</td>
</tr>
<tr>
<td><strong>Repeatability</strong></td>
<td></td>
<td></td>
<td></td>
<td>±0.2°F</td>
</tr>
<tr>
<td><strong>Peak Hold</strong></td>
<td></td>
<td></td>
<td></td>
<td>Microcomputer calculated, switch to “P” to activate</td>
</tr>
<tr>
<td><strong>Ambient Operating Range</strong></td>
<td></td>
<td></td>
<td></td>
<td>0°F to 130°F (-18°C to +55°C)</td>
</tr>
<tr>
<td><strong>Temperature Coefficient</strong></td>
<td></td>
<td></td>
<td></td>
<td>0.01 deg/deg over ambient range</td>
</tr>
<tr>
<td><strong>FM (Factory Mutual) Approved</strong></td>
<td>Discontinued</td>
<td>Discontinued</td>
<td>Discontinued</td>
<td>Not Available</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>11681-1 6.25 V NiCad Battery</td>
<td>11681-1 6.25 V NiCad Battery</td>
<td>11681-2 9V Alkaline battery (NEDA 1604A)</td>
<td></td>
</tr>
<tr>
<td><strong>Battery Life</strong></td>
<td>6 hours. per charge</td>
<td>8 hours per charge</td>
<td></td>
<td>8 hours. per charge</td>
</tr>
<tr>
<td><strong>Low Battery Indicator</strong></td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Noise Rejection</strong></td>
<td>Greater than 40 dB at 60 Hz increasing at 20 dB per decade. Spurious noise attenuated by internal 16 Hz filter. 392AHP includes special noise rejection program for use in presence of rampant EMF such as spark ignition engines.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Size</strong></td>
<td>3” W x 6” L x 1.5” D (7.5 cm x 15 cm x 3.75cm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>12 oz. (340 grams)</td>
<td>12 oz. (340 grams)</td>
<td>7 oz. (198 grams)</td>
<td></td>
</tr>
</tbody>
</table>

*All 392A Models Available in °F, °C, or Dual Scale, add “F”, “C” or “D” to Model Number.*

### 392 Series Meter Accessories

<table>
<thead>
<tr>
<th>DA-4</th>
<th>Silicone Paste</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA-6</td>
<td>Belt-Clip Meter Case with Hand Strap</td>
</tr>
<tr>
<td>DA-10</td>
<td>Nylon Safety Wrist Strap</td>
</tr>
<tr>
<td>12423-06</td>
<td>Shock-Proof Attache-Style Instrument Case</td>
</tr>
<tr>
<td>MA-150</td>
<td>Battery Recharger, 120V AC 50/60Hz</td>
</tr>
<tr>
<td>MA-150E</td>
<td>Battery Recharger, 220V AC 50/60Hz, European</td>
</tr>
<tr>
<td>11681-1</td>
<td>Spare NiCad Battery Pack</td>
</tr>
<tr>
<td>11681-2</td>
<td>Discontinued</td>
</tr>
<tr>
<td>12232</td>
<td>Standard 9V Alkaline Battery</td>
</tr>
</tbody>
</table>

### Meter Options

392NIST Certificate with 3 Standard Calibration Points between 32°F (0°C) & 500°F (250°C) Meter calibration includes one probe.

392NIST-1 Certificate with 3 User-specified Calibration Points between -40°F (-40°C) & 600°F (315°C) Meter calibration includes one probe.