Handheld Thermometer

TTI-10

- High Accuracy Handheld Thermometer
- High Resolution, to 0.001°C
- Perfect Standard for use with Isocal-6, Fast-Cal & Dry Blocks

The TTI-10 is a high accuracy handheld temperature indicator with two platinum resistance thermometer inputs. The high precision makes the instrument particularly suitable as a portable reference thermometer to use alongside Isotech temperature calibrators such as the Fast-Cal, Isocal-6 and Dry Block ranges. It is also suited for high accuracy measurements in industrial and scientific applications.

TTI-10 brings laboratory level performance of up to 10mK (0.01°C) and resolution up to 0.001°C in a portable handheld instrument. Battery life is typically 20 hours from a 9V PP3 battery and a protective rubber boot offers protection in field use.

The instrument can capture the minimum, maximum and average values over up to 4000 measurements with a logging rate selectable in the range of 1 second to 30 minutes.

The TTI-10 has an easy to use “learning calibration mode” that allows the TTI-10 to be system calibrated with a Platinum Resistance Thermometer simply by comparing it to a calibrated standard thermometer, no need to calculate coefficients or data, simply enter the reference probe temperature or temperatures and the TTI-10 does the work for you.

The USB interface allows connection to Isotech Cal Notepad software with its charting and logging features.

TTI-10 supports Isotech Semi Standard Platinum Resistance probes with system uncertainties (probe and instrument) as low as 20mK. We recommend the 935-14-61 and 935-14-16 probes detailed below and have special calibration deals available. Other probes and ranges are available, refer to Semi Standards – Platinum Resistance Thermometers in catalogue.
Specifications

Input Channels: Two: 100 Ohm PRT, EN 60751 (Pt100), Four Wire

Range: -200°C to +850°C

Units: °C, °F and Ohms

Resolution: 0.001°C from -199.999°C to +199.999°C, remaining range 0.01°C

Accuracy: ±0.012°C from -80°C to 199.999°C

Instrument Only: ±0.02°C ±0.0015% RDG from 200°C to 660°C

Logging: Record Average, Min and Max over 4000 measurements

Measuring interval: Adjustable: 1 second to 30 minutes

PC Interface: USB - Cable Included

Connectors: High Quality Latching Metal: Lemo:

Working temperature: 0°C to +40°C

Display: 2-line LCD

Display Single Channel or Dual Channels Simultaneously

Housing: Plastic (ABS) supplied with protective rubber boot

Weight: 300g

Power Supply: 9V battery PP3 (or via USB Cable)

Battery Life: Typically 20 Hours

Dimensions: 200 x 85 x 40 mm (LxWxH)

Options

Semi Standard PRT
935-14-112-TTI

Isotech Semi Standard Platinum Resistance Thermometer:
Fast Response, 2m Cable Length, four wire with Lemo plug fitted

UKAS System Calibration
TTI-10-14-112-SYST

Recommended: -50°C to 199.999°C Four Point System Calibration,
Uncertainty across range 0.025°C (25mK)

Semi Standard PRT
935-14-61-TTI

Isotech Semi Standard Platinum Resistance Thermometer:
Fast Response, 2m Cable Length, four wire with Lemo plug fitted

UKAS System Calibration
TTI-10-14-61-SYST

Recommended: -50°C to 199.999°C Four Point System Calibration,
Uncertainty across range 0.02°C (20mK)

Semi Standard PRT
935-14-116-TTI

Isotech Semi Standard Platinum Resistance Thermometer:
Fast Response, 2m Cable Length, four wire with Lemo plug fitted

UKAS System Calibration
TTI-10-14-116-SYST

Recommended: 0°C to 420°C Four Point System Calibration,
Uncertainty across range 0.04°C (40mK)

Carrying Case
931-22-101

Recommended Probes (Fit TTI-10 Carry Case)

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum Range</th>
<th>Diameter (A)</th>
<th>Length (B)</th>
<th>Sensing Length (C)</th>
<th>Handle (D)</th>
<th>Cable Length (E)</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>935-14-112/TTI</td>
<td>-50°C to 250°C</td>
<td>3mm</td>
<td>225mm</td>
<td>6mm</td>
<td>No Handle</td>
<td>2m PTFE</td>
<td>Fast Response, Low Stem Conduction</td>
</tr>
<tr>
<td>935-14-61/TTI</td>
<td>-50°C to 250°C</td>
<td>4mm</td>
<td>300mm</td>
<td>6mm</td>
<td>19 x 120mm</td>
<td>2m PTFE</td>
<td>Fast Response, Low Stem Conduction</td>
</tr>
<tr>
<td>935-14-116/TTI</td>
<td>-100°C to 450°C</td>
<td>6mm</td>
<td>350mm</td>
<td>25mm</td>
<td>19 x 120mm</td>
<td>2m PTFE</td>
<td>General Purpose</td>
</tr>
</tbody>
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