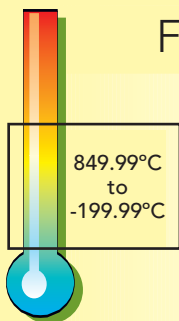


# TTI-6

## For 3 & 4 Wire PT100's



The TTI-6 is a high precision portable thermometer for metrology and other exacting laboratory applications, the TTI-6 is a proven instrument used World-wide as a laboratory and site standard. It is particularly suitable as the reference standard for temperature calibration baths.

The TTI-6 Digital Thermometer utilises highly advanced microprocessor circuit design to achieve exceptional measuring accuracy, linearisation conformity and stability in a versatile but easy to use configuration.

Based on a high resolution 20 Bit Analogue to Digital convertor, all measurement computations are performed digitally without drift. The 5 LED display provides a readout to 0.01°C over the entire -199.99°C to +849.99°C range; alternatively °F, Kelvin or Ohms values can be displayed up to 999.99 units.

Single or dual Pt100 3 or 4 wire sensors are accepted, the TTI-6 will automatically recognise and select 3 or 4 wire mode. Display of input A, B or A - B (differential) can be selected; a differential "zero function" allows sensor accuracy differences to be eliminated for accurate differential readings.

Calibrated sensors can have their calibration points programmed into the TTI-6 via a personal computer using Isotech Software. The instrument then digitally self calibrates to the probe(s) providing corrected temperature readout to give optimum system accuracy.

A common application is for the comparison calibration of a sensor on channel B against a reference standard on channel A. With one of the Selector Switches several sensors can easily be compared to a standard probe on A.

The instrument includes a UKAS certificate as standard (simulation calibrated). Isotech also offers a complete system calibration (probe and instrument combined). Refer to Databook 5 for details.

### Key Features

- Two channel RTD indicator.
- RS232 and analogue output as standard.
- Correction facility for optimum system accuracy.
- Includes UKAS certificate and Cal NotePad Software.

*TTI-6 shown with optional  
Terminal Adaptor and Probe*



## TTI-6

For 3 &amp; 4 Wire PT100's

Input Type

Temperature Range

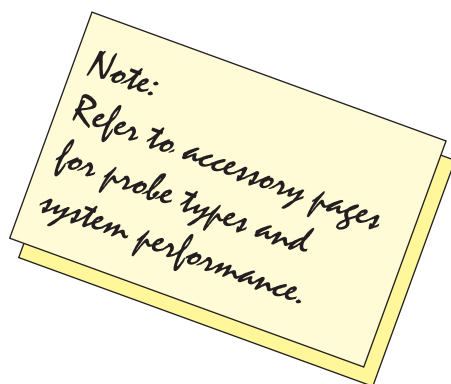
Overall accuracy

**Pt100**

-199.99°C to 849.99°C

±0.02°C ±1 digit for range -200°C to +500°C  
 ±0.005% reading ±1 digit for range 500°C to 850°C

To IEC 751, Amendment 2,  
 (1995. -199.99 to 849.99°C. Ro=100Ω.  
 Two input channels, each 3 or 4 wire connection  
 with automatic recognition (with manual override)



## Options

Carrying Case	931-22-71	Soft vinyl carrying case
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<b>Model No.</b>	TTI-6
<b>Linearisation Conformity</b>	±0.01°C
<b>Stability</b> (vs ambient temperature)	0.0025°C / °C ambient change
<b>Pt100 Sensor Current</b>	0.5mA nominal
<b>Resolution of data display</b>	0.01°C, K, °F, Ω

Note: All values are valid for a nominal 240V 50Hz supply and 20°C ambient temperature (±2°C)

**Measurement units** °C, °F, K, Ω,

<b>Measurement modes</b>	Input A or B or A-B (differential) Null facility in A-B mode
<b>Custom calibration</b>	Up to 10 calibration values can be allocated to (via PC DOS software) channels A and B. Values are retained in non-volatile memory until replaced by user
<b>Null Function</b>	Corrects differential temperature readout between two sensors to zero
<b>Display</b>	14mm LED, 5 digit, 999.99 range
<b>Front panel controls</b>	5 x membrane keys for user functions
<b>Input Connections</b>	2 x Pt100 via 'Lemo' connectors
<b>Analogue output (standard)</b>	Analogue 0 to 1 Volt d.c. Between programmable (standard) lower and upper set limits representing channel A, B or A-B. Accuracy 0.5% of reading. Non-isolated
<b>Power Supply</b>	Internal chargeable batteries. Mains 220/240V 50/60Hz, adaptor included. Battery life up to 12 hours with full charge dependent on pattern of usage. Charger requirement 10-11.5V d.c. 1A.10W nominal, max 20W
<b>Overall dimensions</b>	Height 145mm Width 66mm Depth 240mm
<b>Weight</b>	1.5kg
<b>How to Order</b>	TTI-6