

especially for  
infrared



## Infrared Thermometer Calibrator T-1200PIR

- Generates temperatures from 50 °C to 1200 °C.
- The calibrator provides high homogeneity of the black body cavity <1°C.
- Accompanies a "N" type thermocouple for cavity reference temperature.

### Technical Specification

### T-1200PIR

<b>Operating Range</b> ambient temperature: 23 °C	50 °C to 1200 °C
<b>Display Accuracy</b> internal reference with external thermometer	± 2.2 °C ± 0.75 °C
<b>Resolution:</b>	± 0.1 °C
<b>Stability:</b>	± 0.2 °C
<b>Target Size:</b>	20 mm
<b>Target Emissivity (ε):</b>	0.99
<b>Heating Time:</b>	45 min (100 °C to 1200 °C)

<b>Cooling Time:</b>	5h (1200 °C to 200 °C)
<b>Weight:</b>	10.4 kg
<b>Power Supply:</b>	230 Vac, 50/60Hz
<b>Electrical Power:</b>	2300 W
<b>Units / Temperature Scales:</b>	°C or °F / IPTS-68 or ITS-90, user selectable
<b>Display:</b>	Graphic vacuum fluorescent with contrast adjustment
<b>Dimensions: (HxWxD)</b>	215 x 390 x 310 mm
<b>Warranty:</b>	1 year, except for rechargeable battery

### Electrical Input Specifications

Input Ranges	Resolution	Accuracy
<b>millivolt</b>		
-150 to 150 mV	0.001 mV	± 0.01 % FS
-500 to -150 mV	0.01 mV	± 0.02 % FS
150 to 2450 mV	0.01 mV	± 0.02 % FS
<b>mA</b>		
-5 to 24.5 mA	0.0001 mA	± 0.02 % FS
<b>resistance</b>		
0 to 400 Ω	0.01 Ω	± 0.01 % FS
400 to 2500 Ω	0.01 Ω	± 0.03 % FS
<b>Pt-100</b>		
-200 to 850 °C	0.01 °C	± 0.1 °C
<b>Pt-1000</b>		
-200 to 400 °C	0.1 °C	± 0.1 °C
<b>TC-B</b>		
50 to -250 °C	0.1 °C	± 2.5 °C
250 to 500 °C	0.1 °C	± 1.5 °C
500 to 1200 °C	0.1 °C	± 1.0 °C
1200 to 1820 °C	0.1 °C	± 0.7 °C
<b>TC-J</b>		
-210 to 1200 °C	0.1 °C	± 0.2 °C

Input Ranges	Resolution	Accuracy
<b>TC-K</b>		
-270 to -150 °C	0.1 °C	± 0.5 °C
-150 to 1370 °C	0.1 °C	± 0.2 °C
<b>TC-T</b>		
-260 to -200 °C	0.1 °C	± 0.6 °C
-200 to -75 °C	0.1 °C	± 0.4 °C
-75 to 400 °C	0.1 °C	± 0.2 °C
<b>TC-N</b>		
-260 to -200 °C	0.1 °C	± 1.0 °C
-200 to -20 °C	0.1 °C	± 0.4 °C
-20 to 1300 °C	0.1 °C	± 0.2 °C
<b>TC-R</b>		
-50 to 300°C	0.1 °C	± 1.0 °C
300 to 1760 °C	0.1 °C	± 0.7 °C
<b>TC-S</b>		
-50 to 300 °C	0.1 °C	± 1.0 °C
300 to 1760 °C	0.1 °C	± 0.7 °C

Accuracy values are valid within one year and temperature range from 20 to 26 °C. Outside these limits add 0.001 % FS / °C, taking 23 °C as the reference temperature. For thermocouples with internal cold junction compensation, add a cold junction compensation error of ± 0.2 °C or ± 0.4 °F.

### Order Code

T-1200PIR-

### Power Supply

- 1 - 115 Vac \* (\*upon request)
- 2 - 230 Vac

**Serial Communication:** Modbus® RTU Protocol (RS-232/ RS-485).

**Included Items:** carrying case, straps, black body insert, test leads, insulation, manual and power cord.

### Optional Accessories:

Communication Interface - Order Code: 06.02.0002-00.