



# Reference Temperature Calibrator TA-1200PLAB

- 5.7" Touchscreen Display
- Operating Range: 50 to 1200 °C.
- External reference thermocouple (Including Au-Pt up to 1100 °C).
- Deviation Function for TC test sensors.
- Resolution: 0.01 °C.
- Stability:  $\pm 0.10$  °C @ 1100 °C.
- Homogeneity: 0.35 °C @ 1100 °C.
- Measurement Zone: 100 mm.
- Immersion: 300 mm.
- Available in Horizontal and Vertical versions.
- Information Infrastructure:
  - Ethernet, Wireless, USB, TCP/IP - Built-in Web Server.

The TA-1200PLAB Calibrator generates temperature values in the block or insert from 50 to 1200 °C.

Its high accuracy and homogeneity is due to the fact that TA-1200PLAB has three control zones, allowing better distribution of temperature throughout the block and ensuring low radial and axial uniformity through the extension of the 100 mm of measurement zone.

It has two inputs for mV and for various thermocouples types, including Au-Pt, with deviation function configurable.

It is available in two mounting versions: horizontal and vertical. TA-1200PLAB incorporates concepts of automatic calibration with calibration management softwares, especially with the Isoplan® Software, such as issuing reports and certificates, task management, calibration data organization and archiving etc.

Technical Specification	TA-1200PLAB
<b>Operating Range</b> (ambient temperature 23 °C)	50 to 1200 °C
<b>Accuracy:</b> internal reference with external probe with external thermometer	± 2.5 °C ± 0.75 °C ± 0.3 °C
<b>Resolution</b>	0.01 °C
<b>Stability:</b>	± 0.1 °C
<b>Axial Uniformity (100 mm)</b>	± 0.30 @ 300 °C ± 0.35 @ 600 °C ± 0.35 @ 1100 °C
<b>Radial Uniformity</b> (between opposite holes)	± 0.1 °C Full Range
<b>Loading effect</b> (4 probes x 1 probe)	± 0.10 @ 200 °C ± 0.20 @ 600 °C ± 0.20 @ 1100 °C
<b>Hysteresis</b>	0.2 °C
<b>Stabilization Time</b>	4 h (25 to 1100 °C)
<b>Heating Time</b>	1 h (25 to 1100 °C)
<b>Cooling Time</b>	10 h (1100 to 200 °C)
<b>Well diameter / depth</b>	Ø 34 x 300 mm
<b>Display</b>	5.7" Resistive Touchscreen
<b>Units / Temperature Scales</b>	°C, °F, K, / ITS-90 or IPTS-68, user selectable
<b>Dimensions (HxWxD)</b>	Vertical Model: 670 x 310 x 410 mm Horizontal Model: 360 x 635 x 401 mm
<b>Weight</b>	30 kg
<b>Power supply</b>	220 Vac, 50/60 Hz
<b>Electric power</b>	6000 W
<b>Warranty</b>	1 year

## Electrical Input Specifications

Input Ranges	Resolution	Accuracy	Remarks
<b>millivolt</b> 0 to 70 mV	0.0001 mV	± 0.005 % FS	R <sub>input</sub> > 10 MΩ
<b>TC-J</b> -210 to 1200 °C / -346 to 2192 °F	0.01 °C / 0.01 °F	± 0.10 °C / 0.20 °F	IEC-60584
<b>TC-K</b> -270 to 1370 °C / -454 to 2498 °F	0.01 °C / 0.01 °F	± 0.10 °C / 0.20 °F @ 1370 °C	IEC-60584
<b>TC-T</b> -260 to 400 °C / -436 to 752 °F	0.01 °C / 0.01 °F	± 0.10 °C / 0.20 °F @ 400 °C	IEC-60584
<b>TC-B</b> 50 to 1820 °C / 122 to 3308 °F	0.01 °C / 0.01 °F	± 0.35 °C / 0.70 °F @ 1820 °C	IEC-60584
<b>TC-R</b> -50 to 1760 °C / -58 to 3200 °F	0.01 °C / 0.01 °F	± 0.35 °C / 0.70 °F @ 1760 °C	IEC-60584
<b>TC-S</b> -50 to 1760 °C / -58 to 3200 °F	0.01 °C / 0.01 °F	± 0.35 °C / 0.70 °F @ 1760 °C	IEC-60584
<b>TC-E</b> -270 to 1000 °C / -454 to 1832 °F	0.01 °C / 0.01 °F	± 0.05 °C / 0.10 °F @ 1000 °C	IEC-60584
<b>TC-N</b> -260 to 1300 °C / -436 to 2372 °F	0.01 °C / 0.01 °F	± 0.10 °C / 0.20 °F @ 1300 °C	IEC-60584
<b>TC-L</b> -200 to 900 °C / -328 to 1652 °F	0.01 °C / 0.01 °F	± 0.10 °C / 0.20 °F @ 900 °C	DIN-43710
<b>TC-C</b> 0 to 2320 °C / 32 to 4208 °F	0.01 °C / 0.01 °F	± 0.25 °C / 0.50 °F @ 1500 °C	W5Re / W26Re
<b>TC-Au-Pt</b> 0 to 1000 °C / 32 to 1832 °F	0.01 °C / 0.01 °F	± 0.06 °C / 0.12 °F @ 1000 °C	ASTM E1751

FS = Full Scale

All specifications are valid for one year.

\* Specifications valid for standard curve.

Thermocouple with internal cold junction compensation, one must consider the error of this cold junction compensation of up to ± 0.2 °C or ± 0.4 °F.

## Order Code

TA-1200PLAB - [ ] - [ ] - IN [ ] [ ]

### Model

H - Horizontal V - Vertical

### Power Supply

2 - 220 Vac

### Included Insert

Choose between the inserts listed below

### Accessories

### Order Code

Inserts:	Holes	TA-1200PLAB-V	TA-1200PLAB-H
IN01	1 x 3/4"	06.04.0051-00	06.04.0075-00
IN02	1 x 1/2"	06.04.0052-00	06.04.0076-00
IN03	1 x 6.0 mm and 3 x 1/4"	06.04.0053-00	06.04.0077-00
IN04	3 x 6.0 mm and 1 x 1/4"	06.04.0054-00	06.04.0078-00
IN05	4 x 6.0 mm	06.04.0055-00	06.04.0079-00
IN06	2 x 6.0 mm and 2 x 1/4"	06.04.0056-00	06.04.0080-00
IN07	1 x 6.0 mm, 1 x 8.0 mm and 1 x 3/8"	06.04.0057-00	06.04.0081-00
IN08	1 x 6.0 mm, 1x 3.0 mm and 2 x 1/4"	06.04.0058-00	06.04.0082-00
IN09	Without hole, to be drilled by the client	06.04.0059-00	06.04.0083-00
IN10	Others, under ordering	06.04.0060-00	06.04.0084-00
IN11	2 x 1/4" 2 x 7 mm	06.04.0061-00	06.04.0085-00

**Included Items:** Insert (selectable), insulation, insert extractor tool, manual and power cord.

**Information Infrastructure:** Ethernet, Wireless, USB, TCP/IP - Built-In Web Server.

**Optional Accessories:** "R" type Reference Thermocouple - Order Code: 04.06.0010-21.