



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

Electrical Input Specifications

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