



TA-1200PLAB

Reference High Temperature Furnace

- Operating Range: 50 to 1200 °C.
- Radial Homogeneity: ± 0.10 °C @ 1100 °C.
- Axial Homogeneity: ± 0.20 °C @ 1100 °C.
- Stability: ± 0.10 °C @ 1100 °C.
- Resolution: 0.01 °C.
- Immersion: 300 mm.
- Measurement Zone: 100 mm.
- Noise reduction design of the heater core.
- External reference thermocouple input.
- Deviation Function for TC test sensors.
- Ethernet, Wireless, USB, TCP/IP - Built-in Web Server.
- Build in VNC for remote access and technical support.
- Meets the AMS2750E recommendations.
- Easy LabView interface with the WebApi commands.
- 5.7" Touchscreen Display.

✓ **Best-in-class temperature stability and uniformity.**

✓ **Use of Type R noble metal thermocouples for uniformity control.**

✓ **3 zones control.**

✓ **Improve uncertainty of thermocouples calibrations.**

Technical Specification	TA-1200PLAB
Operating Range (ambient temperature 23 °C)	50 to 1200 °C
Display Accuracy (Internal Reference)	± 2.5 °C
Resolution:	0.01 °C
Stability:	± 0.10 °C
Axial Uniformity (40 mm): Axial Uniformity (100 mm):	± 0.20 full range ± 0.35 full range
Radial Uniformity (between opposite holes):	± 0.10 °C
Loading effect (4 probes x 1 probe):	± 0.10 @ 200 °C ± 0.20 @ 600 °C ± 0.20 @ 1100 °C
Hysteresis:	0.20 °C
Stabilization Time:	1 h
Heating Rate:	± 6 °C / min
Cooling:	natural
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):	Horizontal Model: 600 x 470 x 450 mm
Weight:	43 kg
Power Supply:	230 Vac, 50/60 Hz
Electric Power:	2500 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

Power Supply

2 - 230 Vac

Included Insert

Choose between the inserts listed below

Accessories

Inserts:	Holes
IN06	2x 6,0 mm e 2x 1/4"
IN07	2x 1/4" and 2x 7 mm
IN10	Others, under ordering.
IN1C	2x 3.5 mm, 2x 4.0 mm, 2x 6.0 mm and 2x 1/4" (Alumina)*
IN2C	1x 1/4" and 6x 7.0 mm (Alumina)*

*consult for availability

Included Items: Insert, insulation, insert extractor tool, manual and power cord.

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