

Surface Sensors Temperature Calibrator T-500PS

- Specially designed for surface sensors calibration such as: RTD, thermocouples with maximum metrological reliability.

- Its flat aluminum surface ensures high thermal conductivity and perfect physical contact between the sensor and the measuring area.
- 80 mm diameter circular surface area.
- It has strategically placed heaters under the measurement area to ensure the best temperature stability and uniformity.
- Includes entrance to accommodate a reference probe. (RTD sensor with CVD parameters)
- Documenting capability: Communication with computer and ISOPLAN® Software.

The T-500PS Calibrator generates temperature from ambient up to 500 ° C in a large surface and high accuracy area for calibration of surface sensors.
The circular 80 mm diameter area distributes uniformly the temperature which allows the calibration of more than one sensor simultaneously. The calibrator has also input for various types of thermocouples and resistance thermometers.
The surface has a lateral hole, where one high accuracy sensor can be used as standard for calibration.
It also has all the common features of the Presys calibrators family: automatic calibration, auxiliary calibrator, communication with the computer and ISOPLAN® etc.

PRESYS®

MANAGEMENT SYSTEM TÜVRheinland Brasil NBR ISO 9001 QUALITY

EF1102-00

Technical Specifications

	T-500PS
Operating Range ambient temperature: 23 °C	ambiente from 500 °C
Display Accuracy:	± (0.4 °C + 0.1% of reading)
Resolution:	0.01 °C
Stability:	± 0.2 °C
Target Size:	80 mm
Target Uniformity (60mm):	± 0.5 °C at 100 ºC ± 1.0 °C at 500 ºC
Healing Time:	30 min (50 °C to 500 °C)
Cooling Time:	30 min (500 °C to 200 °C)
Weight:	9.0 kg
Electric Power	1000 W
Units / Temperature Scales:	°C or °F / IPTS-68 or ITS-90, user selectable
Display:	OLED Graphic
Dimension (HxWxD):	355 x 206 x 318 mm
Warranty:	1 year

Electrical Input Specifications

Inputs Ranges		Resolution	Accuracy
milivolt	-150 to 150 mV	0.001 mV	± 0.01 % FS*
	150 to 2450 mV	0.01 mV	± 0.02 % FS
mA	-1 to 24.5 mA	0.0001 mA	± 0.01 % FS
resistance	0 to 400 Ω	0.01 Ω	± 0.01 % FS
	400 to 2500 Ω	0.01 Ω	± 0.03 % FS
Pt-100	-200 to 850 °C	0.1 °C	± 0.1 °C
Pt-1000	-200 to 400 °C	0.1 °C	± 0.1 °C
Cu-10	-200 a 260 °C	0.1 °C	± 2.0 °C
Ni-100	-60 to 250 °C	0.1 °C	± 0.2 °C
TC-J	-210 to 1200 °C	0.1 °C	± 0.2 °C
TC-K	-270 to -150 °C	0.1 °C	± 0.5 °C
	-150 to 1370 °C	0.1 °C	± 0.2 °C
TC-T	-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
TC-E	-270 to -150 °C	0.1 °C	± 0.3 °C
	-150 to 1000 °C	0.1 °C	± 0.1 °C
TC-N	-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
TC-L	-200 to 900 °C	0.1 °C	± 0.2 °C

(*) FS = Full Scale.
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-500PS – □ – □

Power Supply
1 - 115 Vac
2 - 230 Vac

Reference Thermometer
0 - No Reference Thermometer
1 - N Type Thermocouple sensor
2 - Secondary Pt-100 Sensor

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

Included Items: carrying case, strap, test leads, manual and power cord.

Optional Accessories:
Communication Interface - Order Code: 06.02.0002-00.