PRESYS

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® Software etc.

PRESYS®

MANAGEMENT SYSTEM TÜVRheinland Brasil NBR ISO 9001 QUALITY

Technical Specifications	T-500PS
Operating Range ambient temperature: 23 °C	ambient to 500 °C
Accuracy internal reference	± (0.4 °C + 0.1% of reading)
with external thermometer	± 0.2 °C
Resolution:	± 0.01 °C
Stability:	± 0.2 °C
Surface Diameter:	80 mm
Heating Time:	30 min (50 °C to 500 °C)

Cooling Time:	30 min (500 °C to 200 °C)
Weight:	9 kg
Power Supply:	110 or 220 Vac, 50/60Hz
Electric Power:	1000 W
Units / Temperature Scales:	°C or °F / IPTS-68 or ITS-90 user selectable
Display:	Graphic vacuum fluorescent with contrast adjustment
Dimensions: (HxWxD)	250 x 180 x 270 mm
Warranty:	1 year

Electrical Input Specifications

Input Ranges		Resolution	Accuracy
milivolt	-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
mA	-5 to 24.5 mA	0.0001 mA	± 0.02 % 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	0.01 °C	± 0.1 °C
Pt-1000	-200 to 400 °C	0.1 °C	± 0.1 °C
Cu-10	-200 to 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

Input Ranges		Resolution	Accuracy
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

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 - 110 Vac

2 - 220 Vac

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.