



Surface Sensors Temperature Calibrator TA-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)
- ✓ Advanced Documenting capability
Communication with computer and ISOPLAN® Software.

The TA-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.

Technical Specifications

TA-500PS

Operating Range ambient temperature: 23 °C	ambient from 500 °C
Display Accuracy:	± (0.4 °C + 0.1% of reading)
Resolution:	0.01 °C
Stability:	± 0.2 °C
Target Size:	80 mm
Heating Time:	30 min (50 °C to 500 °C)
Cooling Time:	30 min (500 °C to 200 °C)
Weight:	6.0 kg
Electric Power	800 W
Units / Temperature Scales:	°C or °F / IPTS-68 or ITS-90, user selectable
Display:	5.7" Touch Screen Color Display
Dimension (HxWxD):	350 x 210 x 320 mm
Warranty:	1 year

Electrical Input Specifications

Inputs Ranges		Resolution	Accuracy			
millivolt	-150 to 150 mV	0.001 mV	± 0.01 % FS*	TC-K	-270 to -150 °C	0.1 °C ± 0.5 °C
	150 to 2450 mV	0.01 mV	± 0.02 % FS		-150 to 1370 °C	0.1 °C ± 0.2 °C
mA	-1 to 24.5 mA	0.0001 mA	± 0.01 % FS	TC-T	-260 to -200 °C	0.1 °C ± 0.6 °C
					-200 to -75 °C	0.1 °C ± 0.4 °C
resistance	0 to 400 Ω	0.01 Ω	± 0.01 % FS		-75 to 400 °C	0.1 °C ± 0.2 °C
	400 to 2500 Ω	0.01 Ω	± 0.03 % FS	TC-E	-270 to -150 °C	0.1 °C ± 0.3 °C
Pt-100	-200 to 850 °C	0.1 °C	± 0.1 °C		-150 to 1000 °C	0.1 °C ± 0.1 °C
Pt-1000	-200 to 400 °C	0.1 °C	± 0.1 °C	TC-N	-260 to -200 °C	0.1 °C ± 1.0 °C
Cu-10	-200 a 260 °C	0.1 °C	± 2.0 °C		-200 to -20 °C	0.1 °C ± 0.4 °C
Ni-100	-60 to 250 °C	0.1 °C	± 0.2 °C		-20 to 1300 °C	0.1 °C ± 0.2 °C
TC-J	-210 to 1200 °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

TA-500PS - ☐ - ☐

Power Supply

- 1 - 115 Vac
- 2 - 230 Vac

Reference Thermometer

- 0 - No Reference Thermometer
- 1 - Secondary Pt-100 Sensor

Included Items: carrying case, strap, test leads, Ethernet cable, Wi-Fi Adapter, manual and power cord.