



Multifunctional Temperature Calibrator T-650PH

- Generates temperatures from ambient to 650 °C.
- Dry Block and Black Body Inserts.
- Horizontal mounting, facilitates infrared thermometer calibration.

Technical Specification		T-650PH
Operating Range ambient temperature: 23°C		from ambient to 650 °C
Accuracy	Internal reference	± (0.1 °C + 0.1% of reading)
	with external thermometer	± 0.05 °C
Resolution:		± 0.01 °C
Stability:		± 0.05 °C
Heating Time:		20 min (50 °C to 650 °C)
Cooling Time:		21 min (650 °C to 200 °C)
Temperature Uniformity:		± 0.05 °C

Weight:	9.2 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
Well Diameter / Depth:	Ø 32 mm x 125 mm
Dimensions: (HxWxD)	215 x 390 x 310 mm
Warranty:	1 year, except for rechargeable battery

Electrical Input Specifications

Input Ranges	Resolution	Accuracy
millivolt	-150 to 150 mV	0.001 mV
	-500 to -150 mV	0.01 mV
	150 to 2450 mV	0.01 mV
mA	-5 to 24.5 mA	0.0001 mA
resistance	0 to 400 Ω	0.01 Ω
	400 to 2500 Ω	0.01 Ω
Pt-100	-200 to 850 °C	0.01 °C
Pt-1000	-200 to 400 °C	0.1 °C
Cu-10	-200 to 260 °C	0.1 °C
Ni-100	-60 to 250 °C	0.1 °C
TC-J	-210 to 1200 °C	0.1 °C

Input Ranges	Resolution	Accuracy
TC-K	-270 to -150 °C	0.1 °C
	-150 to 1370 °C	0.1 °C
TC-T	-260 to -200 °C	0.1 °C
	-200 to -75 °C	0.1 °C
	-75 to 400 °C	0.1 °C
TC-E	-270 to -150 °C	0.1 °C
	-150 to 1000 °C	0.1 °C
TC-N	-260 to -200 °C	0.1 °C
	-200 to -20 °C	0.1 °C
	-20 to 1300 °C	0.1 °C
TC-L	-200 to 900 °C	0.1 °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-650PH - [] - IN [] [] - [] []

Power Supply

1 - 110 Vac - 2 - 220 Vac

Included Insert

Choose between the inserts listed below. Unless specified, the accompanying insert is IN06.

Black Body Insert

BB - Black Body Insert

Accessories:

Inserts:	Holes
IN01	1x 3/4"
IN02	1x 1/2"
IN03	1x 6.0 mm and 3x 1/4"
IN04	3x 6.0 mm and 1x 1/4"
IN05	4x 6.0 mm
IN06	2x 6.0 mm and 2x 1/4"
IN07	1x 6.0 mm, 1x 8.0 mm and 1x 3/8"
IN08	1x 6.0 mm, 1x 3.0 mm and 2x 1/4"
IN09	Without hole, to be drilled by the client
IN10	Others, under ordering

Order Code

T-650PH
06.04.0096-00
06.04.0097-00
06.04.0098-00
06.04.0099-00
06.04.0100-00
06.04.0101-00
06.04.0102-00
06.04.0103-00
06.04.0104-00
06.04.0105-00

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

Included Items: carrying case, straps, insert (selectable), insert extractor tool, test leads, manual and power cord.

Optional Accessories:

Black Body Insert - Order Code: 06.09.0031-00.
Type «N» Thermocouple for black body- Order Code: 01.22.0062-21.
Communication Interface - Order Code: 06.02.0002-00.