QUARTZ T

PORTABLE TEMPERATURE CALIBRATOR -50/+150°C



The new **QUARTZ T** are compact portable temperature calibrators for laboratory and field testing of temperature sensors, thermocouples and RTD sensors.
They are equipped with an Anticorodal block with a 35 mm diameter hole and 135 mm depth in which the reduction inserts are housed; the interchangeability of the insert makes possible to test sensors of various lengths and diameters.
The equalizing block is heated and cooled by static Peltier thermoeletric modules.
They are equipped with a new 32-bit PID microprocessor-based controller with resolution up to 0.001 °C, unit setting in °C °F and K, programming of ascent/descent ramps and storage of the thermostats' operative temperature.
The new **QUARTZ T** series of calibrators is equipped with an innovative touch-sensitive display, where the various icons are graphically displayed, making it easier to select different instrument settings.
The new **QUARTZ T** are also available in the **3I version**, in which the instruments are equipped with an acquisition card having three configurable input to be able to connect all types of sensors:

- EXT and REF to be able to connect thermocouples type B, E, J, K, N, R, S, T and RTDs type PT100, PT1000
- ANALOG for probes with 0-10V or 4-20 mA output

The REF input is provided for the reference sample probe, thus obtaining a complete calibration system which can be certified by Accredia centres, in compliance with ISO 9000 regulations.
The EXT input is provided for probes that are being tested; hence, the instrument can display the temperature of the well, the temperature of the sensor to be checked and the temperature of the reference sample probe, at the same time.

The **QUARTZ T** are equipped with B type USB serial interface to operate in automatic mode connected to the PC by means of the Aq2Sp2 software which is capable to automate control procedure and allows to print reports, so they are easily traceable in compliance with ISO 9000 standards.

APPLICATIONS:

- Control and calibration of temperature sensors, in laboratory and in field, in accordance with ISO 9000 standards
- Control of thermostats
- Automatic computer-controlled calibrations

MAIN CHARACTERISTICS:

- Operating range: -50°C (-58°F)/ +150°C (302°F)
- 2 different models
- Hight stability and precision
- Touch Screen Display
- Display resolution up to 0.001
- Light weight and compactness
- Multi-hole inserts available
- Automatic ramp function
- USB connection

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TESTING EXPERTISE

ACCESSORIES

Standard Equipments:

- Calibrator QUARTZT/+T
- Electric power cable
- Kit of fuses
- Thermostat connection cables
- Instruction manual
- Test report
- Tweezers for insert removing
- 2D1191: 6 holes insert (Ø 3.5 - 4.5 - 5.5 - 6.5 - 8.5 - 10.5 mm)
- USB serial interface
- Kit of clamp connection (only 3I version)

Accessories on demand:

- Insert with customizable holes
- Aq2Sp2 software
- ACCREDIA certificate (only 3I version) performed with sample probe connected to QUARTZT/+T
- Pt 100 sample probe
- USB cable
- Cordura® soft bag
- Aluminium case

The calibrators are supplied with a standard insert, but various inserts with custom holes are also available, as well as an insert for calibrating optical pyrometers. **(Code 2D3080)**.



Touch Display

Touch-sensitive display with graphic visualization of the various functions allowing the various functions to be activated intuitively without having to consult the user manual.
The new 32-bit microprocessor-based PID controller allows a resolution down to 0.001 °C.



Cordura® Soft Bag

Code: 2TRMBAG-FLUID
Dimensions: 410X220X380 mm
Weight: 1.450 kg
Packaging dimensions: 600x370x500 mm

Pratical and sturdy Cordura® bag with two side pockets for inserts, a front pocket for documents, shoulder carrying strap; particularly lightweight, it is suitable for carryng and protecting the calibrator with its inserts.



Aluminium case

Code: 2DC505-000
Dimensions: 450x280x380 mm
Weight: 4.8 Kg
Packaging dimensions: 600x370x500 mm

Sturdy aluminum case that provides maximum safety for carrying the instrument.



COMPARATIVE TABLE

Specifications	QUARTZT	QUARTZ+T
Temperature range*	-30℃÷+150℃	-50℃÷+120℃
Display	SCREEN TOUCH	
Dysplay accuracy**	±0.15℃ full temperature range	
Units of measure	℃/℉/ K	
Display resolution	0. 1℉ 0.0 1℉ 0.00 1°C	
Mean heating time (stabilization included)	28 min from 20 to 140℃	17 min from Amb. to 120℃
Mean cooling time (stabilization included)	23 min from 20 to -25℃	37 min from Amb. to -45℃
Stability ***	±0.03℃	
Axial uniformity measured from the bottom up to 60 mm	±0.0 1℃	
Hole diameter	35 mm	
Hole depth	135 mm	
Insert material	Anticorodal	
Swich test, voltage	On/Off 4.5 Vdc	
Adjustable ramp function	from a min 0. 1℃/min	
PC interface	B type USB	
External probes	Pt100 at 3/4 wires, Pt1000 - J,K,N,R,S,E,T,B Thermocouples - Sensors with 4-20 mA or 0-10V output	
Automatic calibration	on 5 points	
Operating voltage	115 or 230 VAC 50/60 HZ	
Electric power	350W	400W
Calibrator size	160x350x360 mm	
Calibrator weight with standard equipment	9.3 Kg	

* Values measured at room temperature +20°C
** Temperature deviation between the display and the reference probe
*** Maximum temperature difference at a stable temperature over 30 minutes

How to order:

Standard Version

QUARTZT-00-1
QUARTZ+T-00-1
115V 50/60 Hz
QUARTZT-00-2
QUARTZ+T-00-2
230V 50/60 Hz

Version with 3 configurable input

QUARTZT-3I-1
QUARZ+T-3I-1
115V 50/60 Hz
QUARTZT-3I-2
QUARTZ+T-3I-2
230V 50/60 Hz

Insert code:

- **2D1192**
  blind insert
  DN 34.7x135 mm.
- **2DC567**
  2 holes insert
  DN 34.7x135 mm;
  6.5 e 19.5 mm
- **INS.SPEC-633-3**
  insert
  DN 34.7x135 mm
  with special holes
  1÷3 holes
  DN 3.5 ÷20 mm.
- **INS.SPEC-633-6**
  insert
  DN 34.7x135 mm
  with special holes
  4÷6 holes
  DN 3.5 ÷20 mm.
- **INS.SPEC-633-10**
  insert
  DN 34.7x135 mm
  with special holes
  7÷10 holes
  DN 3.5 ÷20 mm.
- **2D3080**
  black body
  DN 35x135 mm with
  hole 26 mm.
- **3D3223**
  black body probe
  Pt 100 DN3

CSQ ISO 9001 IQNet CE

CERTIFICATION:
All instruments are supplied with final testing, stability and accuracy report traceable to Accredia standards.

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