

CTC 1205

Compact Temperature Calibrator



- **Temperature Range: 100 °C to 1205 °C**
- **Multi Sensor Calibration**
- **IRI – Intelligent Recalibration Information**
- **Plug and Play reference sensors**
- **Broad range of inserts**
- **Reference sensor protection**

The CTC Series portable temperature calibrator is a fast, time-saving, reliable dry block temperature calibrator designed for on-site use. The large color display is easy-to-read and provides icons and information regarding the status of the calibrator and the calibration in process. Popular functions like automatic switch test and auto stepping are available with special one-key-one-function buttons.

Speed, portability, cleanliness, and wide temperature range are all superior over liquid bath systems.

Specifications

Temperature Range:	100°C to 1205 °C / 212 to 2200°F
Accuracy: (with internal ref. sensor)	±2.0 °C / ±3.6 °F
Accuracy: (with external ref. sensor)	±2.0 °C / ±3.6 °F
Stability:	±0.1 °C / ±0.18°F
Measured after the stability indicator has been on for 10 minutes. Measuring time is 30 minutes.	
Settings	
Resolution	1 or 0.1 od 0.001
Units	°C or °F or K
Heating Time:	23 to 1205 °C / 73 to 2200°F 50 minutes
All specifications are given with an ambient temperature 23°C/73.4°F / ±3°C/5.9°F. Specified at 115V/230V.	
Cooling Time:	1205 to 300 °C / 2200 to 672°F 45 minutes
	300 to 50 °C / 672 to 1222°F 45 minutes
Time to Stability (typical):	15 minutes
Mains Power:	
Voltage:	115 V (90-127) / 230 V (180-254)
Max. Power Consumption	650 VA
Frequency: (non US)	50 Hz ±3, 60 Hz ±3
Instrument Weight:	7,1 Kg
Instrument Dimensions (L x W x H):	248 x 148 x 390 mm
Immersion Depth:	110 mm
Immersion Depth incl. Insulation plug:	137 mm
Well Diameter:	27 mm
Insert Dimension (diameter x length):	25 x 155 mm
Electrical: (Switch Input- mechanical contact)	
Test Voltage:	max. 14 VDC
Test Current:	max. 1 mA
Digital Interface	USB 2.0 Device
Environmental:	
Operating Temperature:	0 to 50°C / 32 to 122°F
Storage Temperature:	-20 to 50°C / -4 to 122°F
Humidity:	5 to 90% Rh, non-condensing
Protection Class:	IP-10
External Reference Sensor: STS-TC-N	100 to 1205°C / 212 to 2200°F
Accuracy	
Hysteresis (@0°C / 32°F)	0,2°C / 0,26°F
Sensing element Type	TC-N
Response time	
STS-1205, t0,5 (50%)	4 sec
STS-1205: t0,9 (90%)	15 sec.

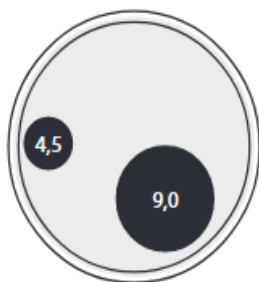
Dimensions

Type	Angled
Diameter	4,5 mm
Length	350 mm

Inserts for CTC-1205 are made of high temperature steel alloy. All specifications on hole sizes refer to the outer diameter of the sensor-under-test. The correct clearance size is applied in all predrilled inserts. All CTC-1205 inserts include an insulation plug.

Predrilles Inserts-metric (mm)	Predrilles Inserts-imperial (in)	Undrilles Inserts
Probe Dia.	1/8 in	Without ref. hole
3 mm	3/16 in	With ref hole
4 mm	1/4 in	
5 mm	5/16 in	
6 mm	3/8 in	
7 mm	7/16 in	
8 mm	1/2 in	
9 mm		
10 mm		
11 mm		
12 mm		

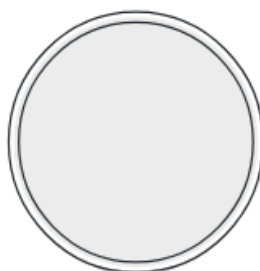
All inserts are supplied with hole for 4,5 mm reference sensor.
All CTS-1205 Inserts are supplied with an insulation plug.



Drilled single hole with ref. hole



Undrilled



undrilled with ref. hole

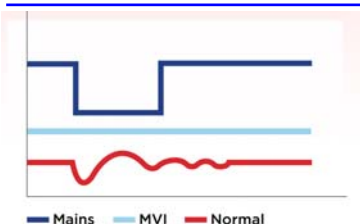


Use of other inserts may reduce performance of the calibrator. To get the best results out of the calibrator, the insert dimensions, tolerance and material is critical. We highly advise using Jofra inserts, as they guarantee trouble free operation.



Need a customized insert?
Please contact us for more information.

MVI – Improved Temperature Stability „Mains power Variance Immunity”



Unstable mains power supplies are a major contributor to on-site calibration inaccuracies. Traditional temperature calibrators often become unstable in production environments where large electrical motors, heating elements, and other devices are periodically cycled on or off. The cycling of supply power can cause the temperature regulator to perform inconsistently leading to both inaccurate readings and unstable temperatures.