

## Infrared calibrator Model CTI5000

WIKA data sheet CT 41.42



for further approvals see  
page 2

### Applications

- Testing and calibration of non-contact temperature measuring instruments
- Heating source for on-site laboratories for the calibration of infrared thermometers
- Also suitable for on-site calibration

### Special features

- Testing of infrared thermometers across a wide temperature range; 50 ... 500 °C (122 ... 932 °F)
- Large surface area of the black body (Ø 57 mm / 2.24 in) for all types of pyrometers
- Bore to accept a reference sensor
- Low weight and compact design
- Simple operation



Infrared calibrator, model CTI5000

## Description

### Aim – shoot – test

For the calibration of infrared thermometers above ambient temperature, the model CTI5000 is suitable up to 500 °C (932 °F). Due to its stability, the new portable infrared calibrator is particularly suited to the calibration of infrared hand-held thermometers.

The black body has a large diameter so that a wide variety of infrared thermometers can be tested, no matter which lenses are fitted.

The emissivity is fixed at 0.95 and the temperature can be controlled in steps of 0.1 °C.

To check the black body, there is a bore located directly behind the surface so that the measurement can be made with contact and the quality monitored.

# Specifications

## Model CTI5000

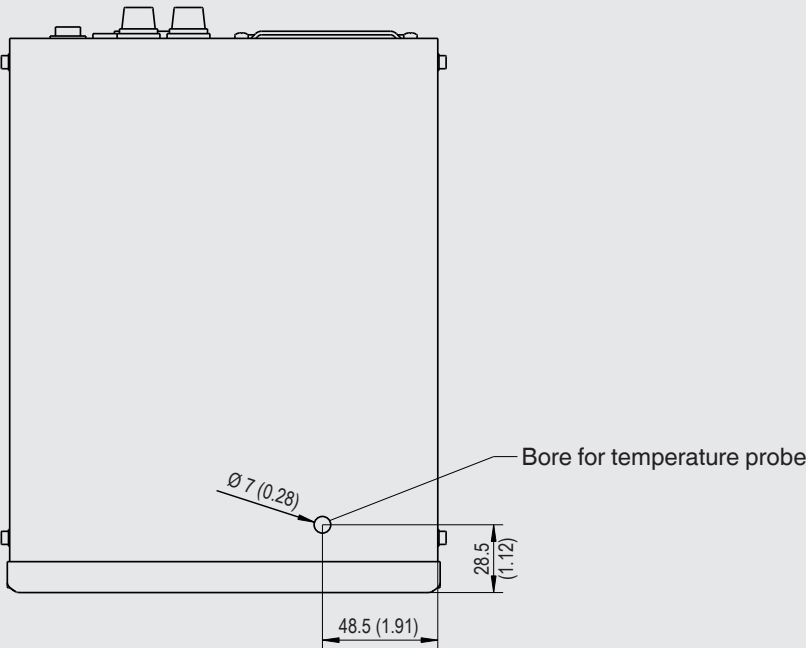
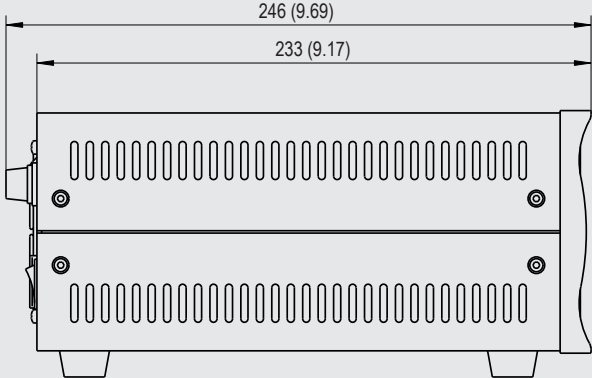
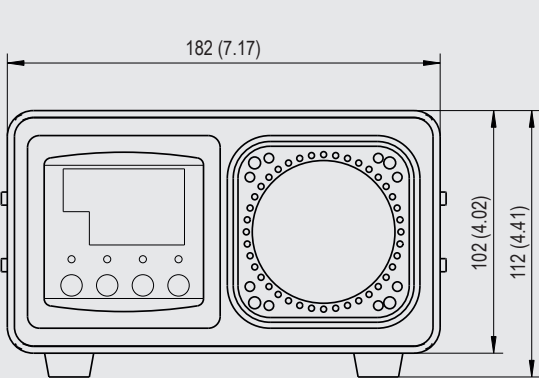
Infrared calibrator	
<b>Indication</b>	
Application range	50 ... 500 °C (122 ... 932 °F)
Stability	±0.1 K to 100 °C (212 °F) ±0.2 K to 350 °C (662 °F) ±0.4 K to 500 °C (932 °F)
Resolution	0.1 K
<b>Temperature control</b>	
Heating time	30 min from T <sub>amb.</sub> to 500 °C (T <sub>amb.</sub> to 932 °F)
Cooling time	40 min from 500 °C to 100 °C (from 932 °F to 212 °F)
Stabilisation time	approx. 15 ... 20 min
<b>Measuring surface</b>	
Emissivity	0.95
Diameter of the measuring surface	57 mm (2.24 in)
<b>Permissible ambient conditions</b>	
Relative humidity	35 ... 85 % r. h. (non-condensing)
Operating temperature	5 ... 35 °C (41 ... 95 °F)
<b>Voltage supply</b>	
Power supply	AC 230 V, 50/60 Hz
Power consumption	275 VA
<b>Case</b>	
Dimensions (W x D x H)	190 x 248 x 113 mm (7.5 x 9.8 x 4.5 in)
Weight	2.1 kg (4.6 lbs)

## Approvals

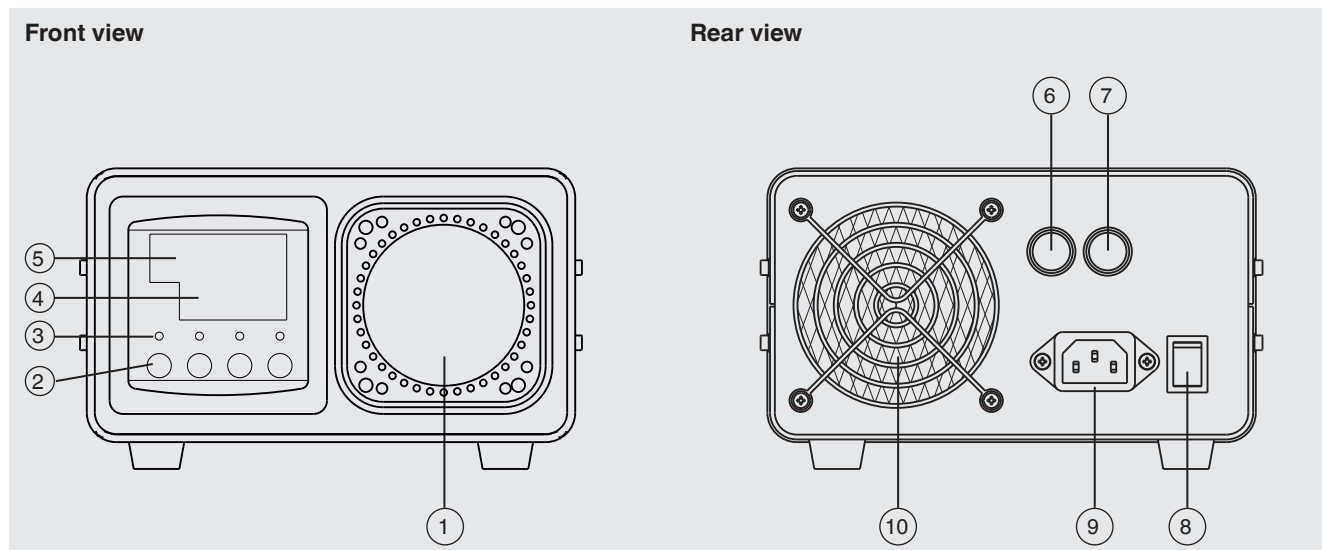
Logo	Description	Country
	<b>EU declaration of conformity</b> ■ EMC directive ■ Low voltage directive ■ RoHS directive	European Union
	<b>EAC</b> ■ EMC directive ■ Low voltage directive	Eurasian Economic Community
-	<b>MTSCHS</b> Permission for commissioning	Kazakhstan
	<b>BelGIM</b> Metrology, measurement technology	Belarus
	<b>Uzstandard</b> Metrology, measurement technology	Uzbekistan

Approvals and certificates, see website

**Dimensions in mm (in)**



## Controls



- |  |                           |
|--|---------------------------|
| ① Measuring surface                                    | ⑥ Fuse for the heating    |
| ② Control panel  | ⑦ Fuse for the control    |
| ③ Status LED's   | ⑧ ON/OFF switch           |
| ④ Indication of the currently-selected set temperature | ⑨ Mains connection socket |
| ⑤ Indication of the current block temperature          | ⑩ Fan                     |

## Scope of delivery

- Infrared calibrator model CTI5000
- Operating instructions
- Power cord

## Ordering information

Model / Mains voltage / Further approvals / Additional ordering information

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