

## Calibration source BR 500



### Features:

- Radiator temperature up to 500 °C
- Excellent homogeneity, precision & long-term stability
- Compact and rugged design
- Perfect for calibrating and testing infrared sensors
- Scope of supply: Calibration source, power supply cable, calibration certificate, manual

### General Specifications

|                        |                                                                         |
|------------------------|-------------------------------------------------------------------------|
| Ambient temperature    | 5 °C ... 30 °C (during operation)                                       |
| Weight                 | 9.8 kg                                                                  |
| Dimensions (H x W x D) | 380 mm x 240 mm x 230 mm                                                |
| Scope of supply        | Calibration source, power supply cable, calibration certificate, manual |

### Electrical Specifications

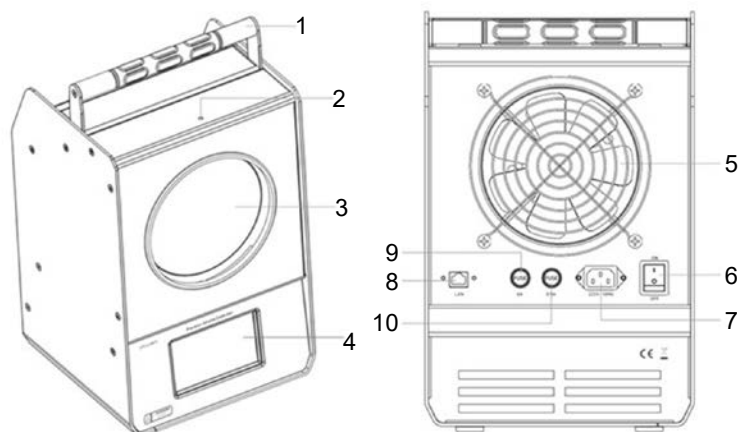
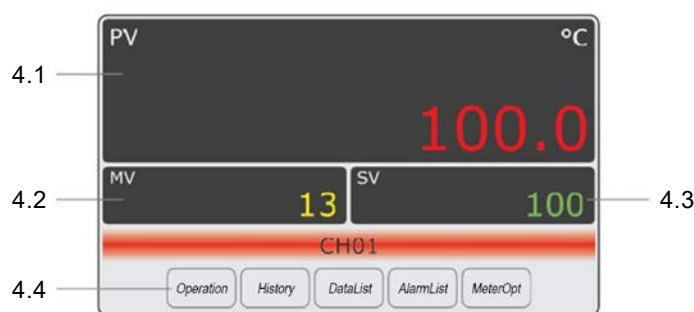
|                    |                                                  |
|--------------------|--------------------------------------------------|
| Temperature sensor | Pt100                                            |
| Controller         | PID                                              |
| Power supply       | 230 V/ AC (±10 %)<br>(optional: 110 V/ AC model) |
| Power consumption  | Max. 1000 W                                      |

### Measurement Specifications

|                                                 |                                                                                                          |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Temperature range (at T <sub>Amb</sub> = 23 °C) | 35 °C ... 500 °C                                                                                         |
| Accuracy                                        | ±0.35 °C at 35 °C<br>±0.50 °C at 100 °C<br>±0.70 °C at 200 °C<br>±1.50 °C at 350 °C<br>±1.9 °C at 500 °C |
| Temperature resolution                          | 0.1 °C at range 500 °C<br>0.01 °C at range 300 °C                                                        |
| Aperture                                        | 152 mm                                                                                                   |
| Emissivity                                      | 0.95                                                                                                     |
| Warm-up time                                    | 20 minutes (35 to 450 °C)<br>10 minutes (450 to 500 °C)                                                  |
| Cool-down time                                  | 40 minutes (500 to 100 °C)<br>40 minutes (100 to 35 °C)                                                  |

<sup>1)</sup> For exact temperature determination of calibration source we recommend the use of a reference infrared thermometer (e.g. optris CTlaser DCI).

### Controls



1. Handle
2. Temperature Detection Hole
3. Infrared Radiation Surface
4. Touch Screen
  - 4.1 PV Value
  - 4.2 MV Value
  - 4.3 SV Value
  - 4.4 Control Keys
5. Ventilating Fan
6. Power Switch
7. Power Input Socket
8. Ethernet Communication Port
9. 6A Fuse
10. 0.5A Fuse