optris BR 500
TECHNICAL DATA
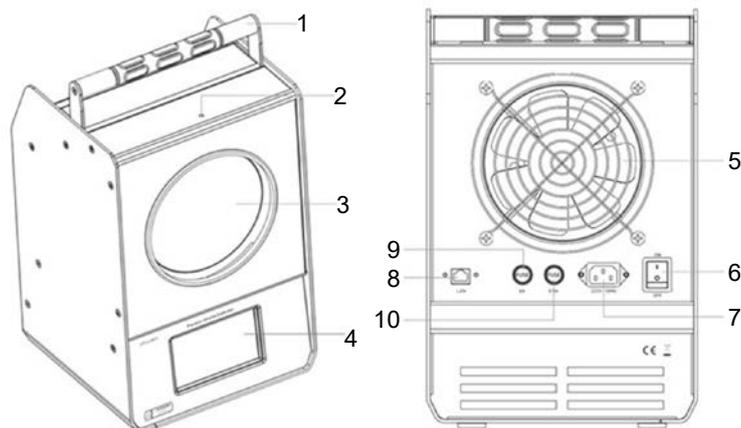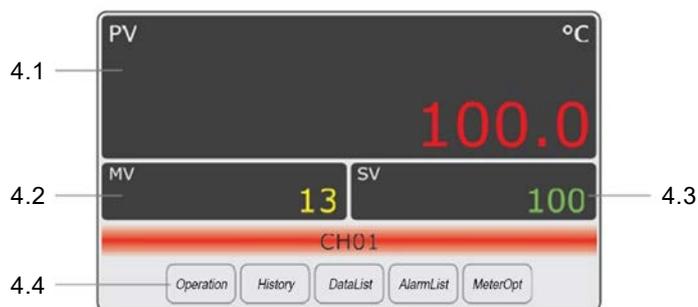
optris infrared measurements

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 cetrificate, 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 cetrificate, manual

Electrical Specifications

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

Measurement Specifications

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

[1] *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

Specifications are subject to change without notice · BR500-EN-2026-02_B