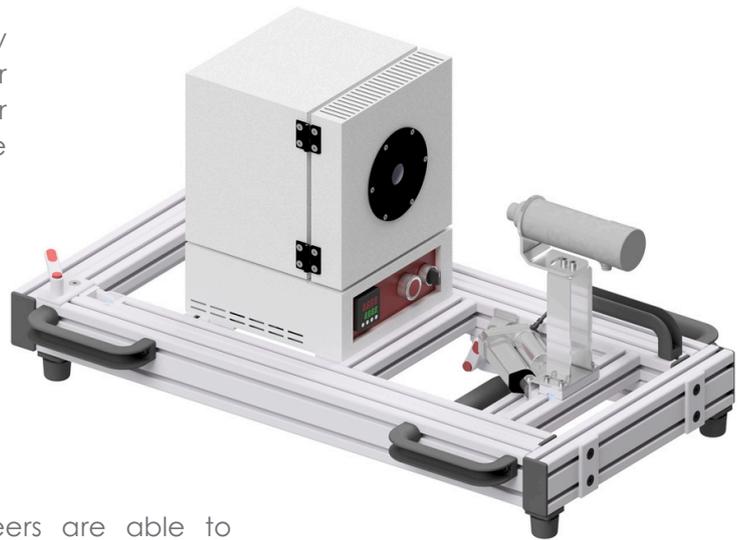


TECHNICAL DATA

BLACKBODY IR-REFERENCE UNIT

The Blackbody IR-Reference Unit is used for the calibration and verification of infrared radiation thermometers and infrared cameras. Maximum temperature up to 950°C, 115/230VAC dual voltage (select Model with order) incl. SelVision IR-MCal Software and 10m connection cable (power & Ethernet) to Selmatec System Server.

The temperature adjustment can be done directly at the black body or via gigabit Ethernet with our SelVision IR-MCal software. Digital PID controller and high-precision temperature sensor provide excellent accuracy and stability.



Highlights

Remote Calibration Support

In cooperation with you, our qualified engineers are able to calibrate IR-Sensors anywhere in the world. Saving long delivery times and high customs duties.

Inline and Lab Calibration

The adjustable base allows for an inline calibration without removing the sensors from the line. It connects with only one cable to an existing Selmatec System, which then allows us to easily access all the installed sensors. With the additional lab table and cable sets the station can also be used as a stand-alone variant for lab calibration.

ISO-Certificates

Certification as proof of a reliable and precise temperature measurement system and to ensure that production remains CQI-9 compliant.

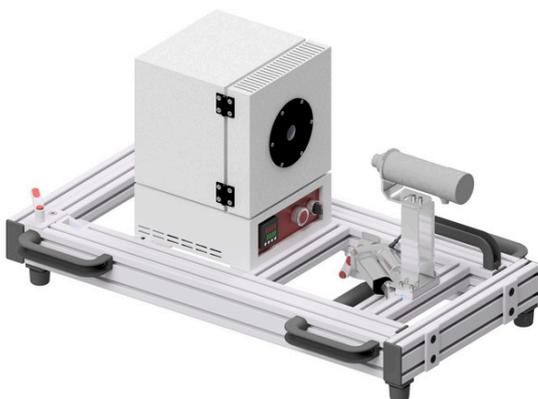


MEASUREMENT SPECIFICATIONS

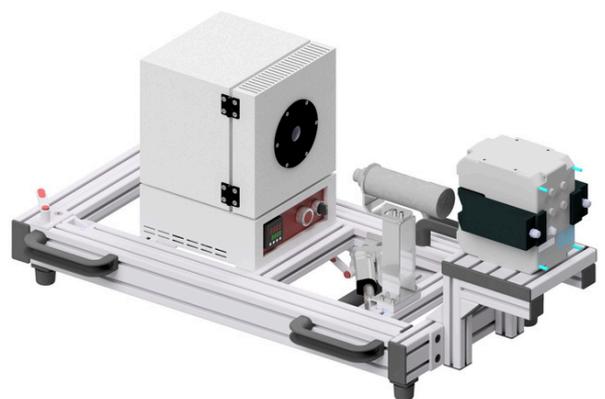
Technical Data	
Type	Blackbody IR-Reference Unit
Temperature range	65°C to 950°C
Aperture diameter	30 mm
Emissivity ¹	0.98 ± 0.005
Measurement uncertainty ¹	1 K + 0,003 · T [°C]
Reproducibility ¹	1 K + 0.001 · T [°C]
Control stability	1 K
Display resolution	1 K
Temperature constancy ¹	0.3 K + 0.001 · T [°C] (for the central area Ø 30 mm, related to the center)
Heat up time	100°C: 10 min, 950 °C: 15 min
Cavity features	Cavity material: Aluminum oxide ceramics Depth: 165 mm (front edge of radiator cover to cavity base) Inner dimensions: 100 x 100 x 115 mm [W x H x D]
Temperature sensor	Type K
Controller	PID
Interface	Gigabit Ethernet
Dimensions	540 mm × 477 ... 828 mm (adjustable) × 891 mm [W × H × D]
Weight	approx. 40 kg
Power supply	230 V AC/ 115 V AC, maximum 1 kW

¹ At 2.4 µm (narrowband) wavelength.

Calibration radiator - Inline

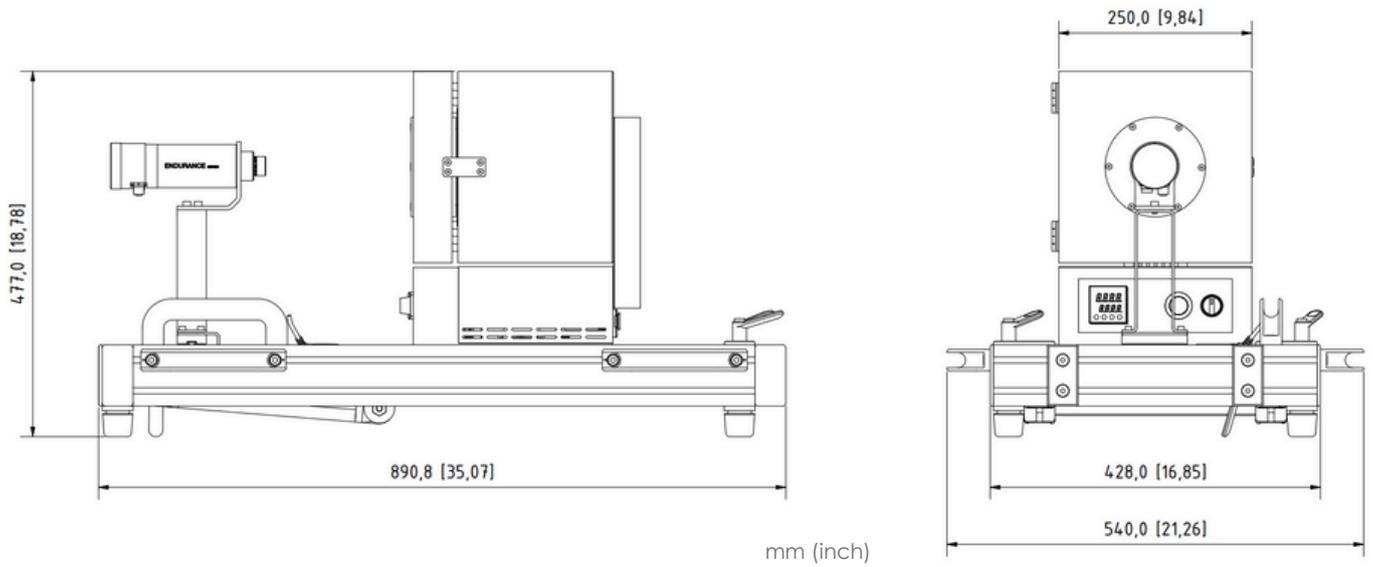


Calibration radiator - Lab

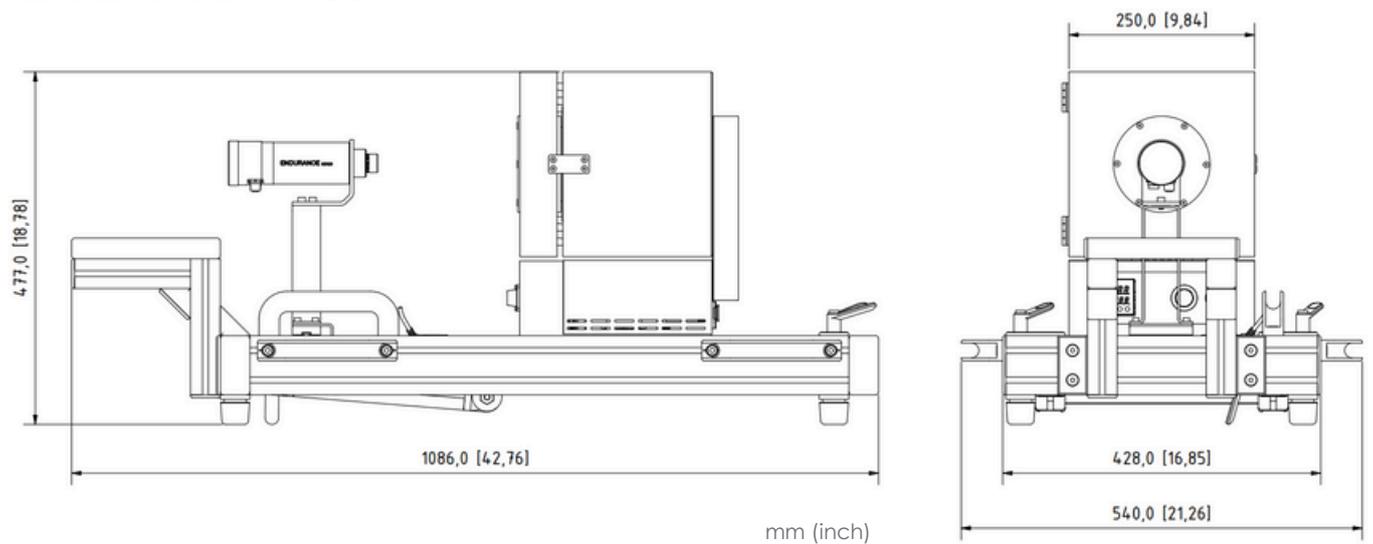


BLACKBODY IR-REFERENCE UNIT DIMENSIONS

Calibration radiator - Inline



Calibration radiator - Lab



ACCESSORIES

Additional mounting bracket for floor mounted Sensors

