

PYROTHERM CS 500

Infrared calibration source/black body

Overview



Description

The infrared radiation source PYROTHERM CS 500 is used for calibration and examination of infrared radiation thermometers and infrared cameras in the temperature range from 50 °C to 500 °C.

Its execution as an extended area radiator results in a compact portable device with a large aperture and a total emissivity of approximately 97 percent. A serial interface RS-485 enables the control of the radiator with PC. Digital PID controller and precision platinum resistance thermometer Pt100 provide excellent accuracy and stability.

Technical data

Type	PYROTHERM CS 500
Temperature range ¹	50 °C to 500 °C
Aperture diameter	60 mm
Emissivity ²	0.97 ± 0.01
Uncertainty ²	1 K + 0.0025 · T [°C]
Control stability	0.2 K
Heat up time	30 min
Temperature sensor	Pt100 class A
Controller	PID
Interface	RS-485
Dimensions	235 mm × 311 mm × 311 mm
Weight	appr. 8 kg
Power supply	115/230 V AC, 500 VA

¹ Specifications for ambient temperature 23 °C. ² At 8 µm to 14 µm wavelength.