



GEMINI R 976

Medium temperature primary
Blackbody source, 30°C to 550°C

The Gemini R 976 portable Blackbody calibration source allows for calibration of non-contact infrared thermometers from 30°C to 550°C. It is suitable for use as a primary radiation source for infrared thermometers.

Description

The Gemini R 976 portable Blackbody calibration source allows for calibration of non-contact infrared thermometers from 30°C to 550°C. It is suitable for use as a primary radiation source for infrared thermometers.

Laboratory performance and low uncertainty calibrations are ensured by the combination of high emissivity and excellent temperature uniformity.

The digital temperature controller allows the block temperature to be set to any value from 30°C to 550°C.

Traceability of the radiance temperature is established by a separate, built-in temperature indicator and an included Platinum resistance thermometer.

A three point traceable calibration certificate is included in standard. UKAS calibration of the resistance thermometers is available in option.

Uniformity of the block is ensured by using distributed heating technology.

Key features:

- Medium temperature radiation primary source: 30°C to 550°C
- Large cavity: 65 mm diameter
- Emissivity: > 0.995

Specifications

Temperature range	30°C to +550°C
Cavity size	65 x 160 mm deep
Stability	$\pm 0.1^{\circ}\text{C}$
Emissivity	> 0.995
Heating time	45 min

General specifications

Size	310 x 265 x 200 mm
Weight	10 kg
Display	Resolution: 0.01°C at 99.99 and 0.1°C at 100 / 550
Power supply	100 / 130 V or 208 / 240 VAC, 50/60 Hz 1000 Watts

Models and accessories

Instrument:

Gemini R 550 976 Medium temperature primary Blackbody source, 30°C to 550°C

Delivered in standard with:

- Standard thermocouple type N 935-14-94/DB
- Cal Notepad software
- Serial communication cable
- User manual
- Traceable certificate

Accessories:

976-01-05F-K	Set of 5 orifice plates to reduce cavity size (50 / 40 / 30 / 20 / 10 mm)
935-14-94/DB	Replacement standard thermocouple type N
931-22-64	Carrying case
984	Gas flow system

Fixed Point cells “hockey puck” type:

431-03-00	Gallium Fixed Point cell (29.7646°C)
976-05-00A	Indium Fixed Point cell (156.60°C)
976-05-00B	Tin Fixed Point cell (231.93°C)
976-05-00C	Zinc Fixed Point cell (419.53°C)
UKAS	5-point calibration certificate
NPL	Calibration certificate

Packing information:

Size 310 x 265 x 200 mm

Weight without packing 10 kg