

PEGASUS R 970

High temperature primary Blackbody source, 150°C à 1200°C

The Pegasus R 970 is a compact furnace for calibration non-contact infrared thermometers from 150°C to 1200°C.

Description

The Pegasus R 970 is a compact furnace for calibration non-contact infrared thermometers from 150°C to 1200°C.

The temperature of the furnace is set on a controller. An independent indicator, whose sensor fits into the cavity, indicates the actual radiance temperature. The sensor can be removed for external calibration or the complete system can be calibrated.

The cavity diameter is 20 mm, depth is 65 mm. Emissivity is 0.995. The cavity is removable and a Fixed Point cell may be put in its place. The cavity inside the Fixed Point cell is 10 mm in diameter by 65 mm deep to the tip of a 120° cone.

Blackbody target radiation source - For calibration radiation thermometers in the wavelength range 0.9 to 14 µm

The Blackbody radiation source is housed with suitable insulation, in the tube furnace. The aperture is 20 mm in diameter.

A Pegasus R 970 Blackbody source has been calibrated at NPL (UK National Physical Laboratory) with an uncertainty of ±2°C and the calibration was found to be reproducible after a period of about 2 months. A scan across the aperture at 444°C showed that the source was uniform to better than 0.3°C.

Traceability may be established with a UKAS certificate for the in-built indicator and supplied probe (935-14-40).

Key features:

- High temperature radiation primary source: 150°C to 1200°C
- Compact cavity: 20 mm diameter
- Emissivity: > 0.995

Specifications

Temperature range	150°C to 1200°C
Cavity size	20 x 65 mm deep
Stability	±0.1°C
Emissivity	0.995
Heating time	25°C/min

General specifications

Size	310 x 265 x 200 mm
Weight	13 kg
Display	Resolution: 0.1°C at 999.9 and 1°C at 1000 / 1200
Power supply	100 / 130 V or 208 / 240 VAC, 50/60 Hz 800 Watts

Models and accessories

Instrument:

Pegasus R 970 High temperature primary Blackbody source, 150°C to 1200°C

Delivered in standard with:

- Standard probe 935-14-40
- Cal Notepad software
- Serial communication cable
- User manual
- Traceable certificate

Accessories:

935-14-40	Replacement working standard Pt100 probe
931-22-64	Carrying case
970-01-03	Spare insulation pack for Blackbody source
984	Gas flow system for high temperatures (Aluminium and Silver cells)

Blackbody cells:

970-06-00A	Indium Blackbody cell (156.60°C)
970-06-00B	Tin Blackbody cell (231.93°C)
970-06-00C	Zinc Blackbody cell (419.53°C)
970-06-00D	Aluminium Blackbody cell (660.323°C)
970-06-00E	Silver Blackbody cell (961.78°C)
UKAS	Calibration certificate
NPL	Calibration certificate

Packing information:

Size	310 x 265 x 200 mm
Weight without packing	13 kg