

Pegasus R High-Temperature Blackbody Source

Model 970

The Pegasus R is a compact, portable, high-temperature furnace for calibrating infrared thermometers.

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

The cavity diameter is 20mm, and the depth is 65mm.

A Pegasus blackbody source has been calibrated at NPL (National Physical Laboratory) with an uncertainty of $\pm 2^\circ\text{C}$ 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 NIST certificate for the built-in indicator and supplied probe (935-14-40).

Blackbody Fixed-Point Cells for Use with Pegasus R

The entire cavity is removable and small fixed-point cells may be put in its place, creating an unparalleled system of portability and accuracy.

For the best calibration of radiation thermometers in the wavelength range 0.9 to 14 microns, a blackbody radiation source, based on a design study by England's National Physical Laboratory (NPL) for Isothermal Technology Ltd, is housed, with suitable insulation, in the Pegasus tube furnace.

The aperture is 10mm in diameter.

Now Includes
PC Interface and Cal NotePad
Windows Software

SPECIFICATIONS

Model	970
Temperature Range	150°C to 1200°C
Emissivity	0.995
Stability	$\pm 0.1^\circ\text{C}$
Display Resolution	0.1°C to 999.9; 1°C from 1000 to 1200
Cavity Size	20mm diameter 65mm deep
Time to Temperature	20 minutes
Power	110 VAC $\pm 10\%$ (50/60Hz) 2.3kW typical
Dimensions	310mm x 265mm x 200mm (HxWxD)
Weight	15.9 lbs (7.2 kg)

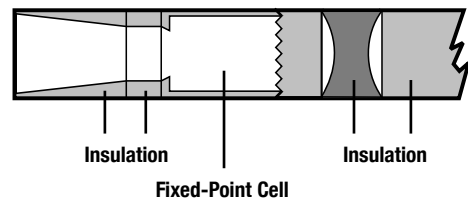
ACCESSORIES

970-06-00A	Indium Blackbody Cell
970-06-00B	Tin Blackbody Cell
970-06-00C	Zinc Blackbody Cell
970-06-00D	Aluminum Blackbody Cell
970-06-00E	Silver Blackbody Cell
935-14-40	Replacement Probe
931-22-27	Carrying Case
984-00-00	Gas Flow System

HOW TO ORDER

970 Pegasus R	Black Body Source
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Blackbody Cavity (shown in section)



Key Features

- High-Temperature Radiation Pyrometer Primary Source
- 0.995 Emissivity
- Accepts Fixed-Point Cells

