

Blackbody Source Pegasus R

150°C to 1200°C

- Compact 20mm Diameter Cavity
- Emissivity > 0.995 Cavity 20 x 65mm

The Pegasus R is a compact furnace for calibrating radiation pyrometers.

The temperature of the furnace is set on a controller, whilst 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.

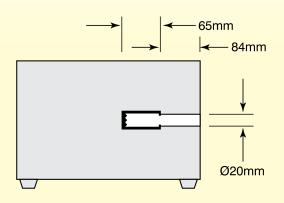
The cavity diameter is 20mm, the depth 65mm. Emissivity is 0.995. The cavity is removable and a fixed point cell may be put in its place. The cavity inside the fixed point cell is 10mm in diameter by 65mm deep to the tip of a 120° cone.

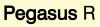
Blackbody target radiation source for use with Pegasus R.

For calibration radiation thermometers in the wavelength range 0.9 to 14 micrometres. 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 20mm in diameter.

A Pegasus blackbody source has been calibrated at NPL (Nat. Physical Laboratory) with an uncertainty of $\pm 2^{\circ}$ 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).







Model Temperature Range Emissivity Stability Display resolution

Cavity size

Heating Rate PC Interface Power

Dimensions

Weight

Options

Indium Blackbody Cell Tin Blackbody Cell Zinc Blackbody Cell Aluminium Blackbody Cell Silver Blackbody Cell Probe Carrying Case Gas Flow System

How to order

Model 970 Pegasus R Please state supply voltage required Please state any special calibration requirement

970 150°C to 1200°C 0.995 ±0.1°C 0.1°C to 999.9; 1°C from 1000 to 1200 20mm diameter 65mm deep 25°C/minute Included 800W typical 100-130 or 208-240 Vac 50/60Hz Height 310mm Width 265mm Depth 200mm 13 kg

970-06-00A 970-06-00B 970-06-00C 970-06-00D 970-06-00E 935-14-40 931-22-64 984-00-00