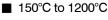




Blackbody Source **Pegasus R**



- 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.

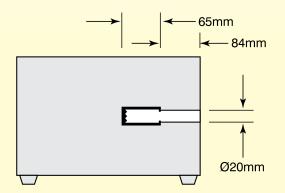
The cavity diameter is 20mm, the depth 65mm. Emissivity is 0.995. The cavity is removable and a fixed point cell may be put in its place. The cavity inside the fixed point cell is 10mm in diameter by 65mm deep to the tip of a 120° cone.

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).



Pegasus R



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 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

How to order

Model 970 Pegasus R

Please state supply voltage required

Please state any special calibration requirement