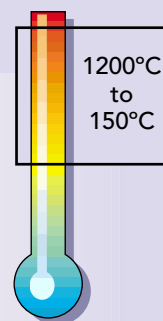


Pegasus R

Model 970



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.

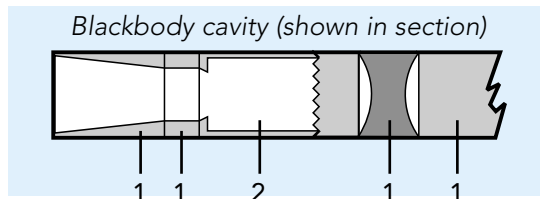
A blackbody radiation source 'based on a design study by England's National Physical Laboratory (NPL)' for Isothermal Technology Ltd is housed, with suitable insulation, in the Pegasus tube furnace.

The aperture is 10mm in diameter.

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 UKAS certificate for the in-built indicator and supplied probe (935-14-40).



1. Insulation

2. Fixed Point Cell (see page four/11)

*High Temperature Radiation Pyrometer Primary Source
NPL Designed Cavity, 0.995 Emissivity
Compact, Accepts Fixed Point Cells*

| | |
|---------------------|--|
| Model No. | 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 | 2.3kW typical 100-130 or 208-240 VAC 50/60Hz |
| Dimensions | Height 310mm Width 265mm Depth 200mm |
| Weight | 7.2 kg |

Options

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

Now includes PC Interface and Windows software as standard

How to order

Model 970 Pegasus R
Please state supply voltage required
Please state if UKAS calibration, or NPL calibration is required

