



Blackbody Source **Hyperion R**

- Low Temperature Radiation Pyrometer Primary Source
- 50mm Diameter Cavity
- 0.995 Emissivity

The Hyperion R Portable Blackbody Calibration Source allows for calibration of noncontact infrared thermometers over the temperature range -20°C to 125°C.

One application is the calibration of non-contact medical thermometers. With the sudden step increase in the demand to check and calibrate medical thermometers we have supplied many units for both portable and laboratory testing relating to the coronavirus outbreak.

It is suitable for use as a primary radiation source for infrared thermometers from sub zero to 125° C.

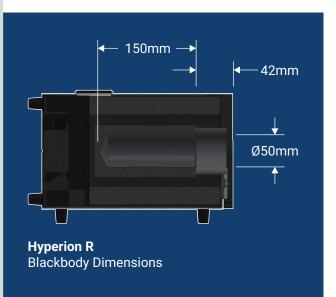
Laboratory performance and low uncertainty calibrations are ensured by the combination by high emissivity and excellent temperature uniformity.

The digital temperature controller allows the block temperature to be set to any value from -20°C to 125°C.

Traceability of the radiance temperature is established by a separate, built-in temperature indicator and included platinum resistance thermometer.

A three point traceable calibration certificate is included. UKAS calibration of the resistance thermometer is available, as is radiometric calibration.

Uniformity of the block is ensured by using distributed thermoelectric heat pumps with the benefit of solid state, vibration free cooling.





Model Temperature Range

Emissivity Stability Display Resolution Aperture Diameter Cavity Depth PC Interface Power Voltage

Dimensions

Weight

Options

Orifice Plates 10, 20, 30, 40mm 812-01-06 (Restricts Cavity Apterture)

How to Order Model 982 Hyperion R Please state any special calibration requirement

NEW 2020 TEMPERATURE RANGE INCREASED TO -20 TO 125°C

982

-20°C to 125°C* *In an ambient of 20°C, minimum temperature 40°C below ambient Greater than 0.995 ±0.1°C

0.01°C to 0.1°C

50mm 150mm Included 200 Watts typical Universal Input 80-264 V 50/60Hz Height 310mm Width 265mm Depth 200mm

8.3kg

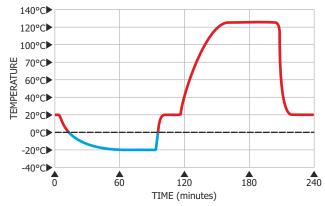


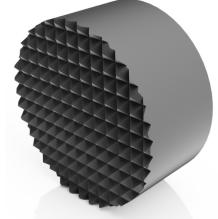
Gallium Fixed Point Cell

Choose Hyperion R for

- Superior Performance isothermal cavity offers higher emissivity than flat plates
- Low Uncertainty Calibration Source for IR Thermometers and Thermal Imagers
- Calibration in the laboratory, on-site or in production

Heat Up / Cool Down





Following requests from researchers looking to improve the accuracy of infrared measurements, we have introduced a Gallium Fixed Point Cell, Model 982-05-01.

The cell contains high purity Gallium, 99.99999% (7N). It is placed into the Hyperion R cavity and heated until the metal melts at 29.7646°C.

As the Gallium melts, the temperature remains constant with the "melt plateau" providing a stable, precise constant reference temperature. After all the metal has melted, the cell can be simply frozen by lowering the Hyperion R temperature, no additional equipment is necessary.

