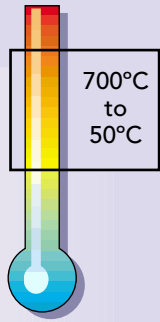


# Gemini R 700

## Model 976



The Gemini R comprises a blackbody with which radiation pyrometers can be calibrated.

The temperature of the cavity can be set to  $\pm 0.1^\circ\text{C}$  over the temperature range  $50^\circ\text{C}$  to  $700^\circ\text{C}$ .

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 temperature reaches  $700^\circ\text{C}$  approximately 170 minutes from switch on.

The variation seen on the controller's temperature indication over a 5 minute period was  $\pm 0.2^\circ\text{C}$ . Similar variations were detected by a radiation thermometer looking into the cavity.

Using a portable radiation thermometer having a target diameter of 15mm, the central 45mm of the target was surveyed. Maximum temperature differences of  $\pm 1^\circ\text{C}$  were found in the range  $100^\circ\text{C}$  to  $700^\circ\text{C}$ .

Traceability may be established with a UKAS certificate for the in-built indicator and supplied probe (935-14-94) Type N Thermocouple.

*Medium Temperature Radiation Pyrometer Primary Source  
65mm Cavity Diameter, 0.995 Emissivity  
Compact, Accepts Fixed Point Cells*

Model No.	976
Temperature range	$50^\circ\text{C}$ to $700^\circ\text{C}$
Emissivity	Greater than 0.995
Stability	$\pm 0.1^\circ\text{C}$
Display Resolution	$0.01^\circ\text{C}$ to 99.99; $0.1^\circ\text{C}$ from 100.0 to 700.0
Cavity size	65mm diameter 160mm deep
Time to temperature	170 minutes
Power	1000 Watts typical 100-130 or 208-240 VAC 50/60Hz
Dimensions	Height 310mm Width 265mm Depth 200mm
Weight	13.3kg

### Options

431-03-00	Gallium Hockey Puck Cell
976-05-00A	Indium Hockey Puck Cell
976-05-00B	Tin Hockey Puck Cell
976-05-00C	Zinc Hockey Puck Cell
935-14-72	Probe
931-22-27	Carrying Case
976-01-05	Set of 5 orifice plates to restrict cavity aperture diameter to 50mm, 40mm, 30mm, 20mm or 10mm.

Now includes PC Interface and Windows software as standard

### How to Order

Model 976 Gemini R

Please state supply voltage required

Please state if UKAS calibration, or NPL calibration is required

