

# Dry Block Calibrators

## Gemini

- 64 x 160mm Calibration Volume
- Two Models - 35°C to 550°C and 50°C to 700°C
- High Capacity Block or Large Removable Block
- PC Interface and Software

The Gemini family of Dry Blocks have high capacity allowing a large number of probes to be calibrated together. They are also suitable to accept large diameter probes with the block volume of a nominal 65 x 160mm.

Whilst the large block takes longer to heat and cool than the Jupiter 650 and Fast-Cal models it can calibrate thermocouples, resistance thermometers, thermostats and sensors that are too large for the smaller blocks.

Available with a fixed block with four 8mm and four 19.5mm pockets or the LRI version which has a removable block. With the LRI model blocks can be drilled to custom configurations.

The Gemini is available in two temperature ranges with each available as a BASIC(B) or SITE(S) variant. The B model includes a sophisticated temperature controller with a dual display for Set Temperature and Dry Block Temperature.

The S model additionally includes a built in digital indicator to which an external standard thermometer can be connected giving greater accuracy eliminating temperature gradient and loading errors. For lab accuracy the Gemini<sup>PLUS</sup> can be used with a high-end temperature indicator such as one of the Isotech True Temperature Indicators (TTI).

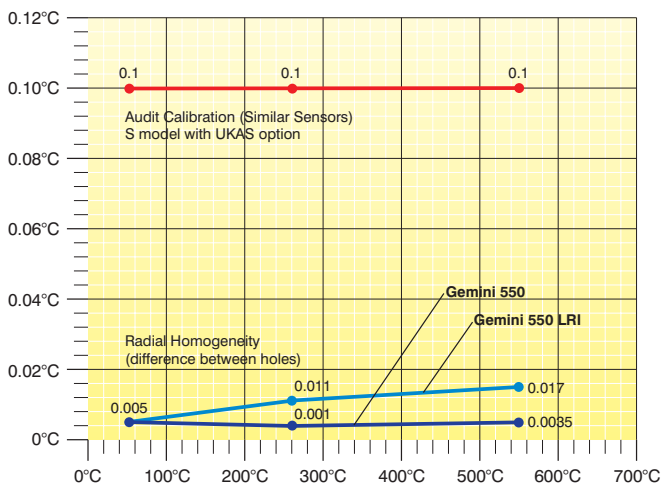


<http://www.isotech.co.uk/industrial/>



Model - Gemini <sup>PLUS</sup>	550	700	550LRI	700LRI
Temperature Range	35°C to 550°C	50°C to 700°C	35°C to 550°C	50°C to 700°C
Absolute stability over 30 minutes	At 35°C ±0.05°C At 250°C ±0.05°C At 550°C ±0.05°C At 700°C ±0.05°C	At 35°C ±0.05°C At 250°C ±0.05°C At 550°C ±0.05°C At 700°C ±0.05°C	At 35°C ±0.02°C At 250°C ±0.03°C At 550°C ±0.04°C At 700°C ±0.05°C	At 35°C ±0.02°C At 250°C ±0.03°C At 550°C ±0.04°C At 700°C ±0.05°C
Computer Interface	Included with Software			
Cools from 550°C to 275°C	35 minutes	-	132 minutes	-
from 550°C to 60°C	345 minutes	-	420 minutes	-
Heats from 30°C to 550°C	35 minutes	-	60 minutes	-
from 50°C to 700°C	-	110 minutes	-	120 minutes
Best Performance	See Graph			
Calibration volume	Fixed 4 x 8mm pockets 4 x 19.5mm pockets All 160mm deep		Removable 64mm Dia x 160mm deep (Standard insert 8 x 8mm pockets All 154mm deep)	
Display Resolution	0.01 to 99.99 0.1 100.0 to 700.0 PC can display 0.01 across whole range with the software included			
Indicator units	°C, °F, K			
Voltage	100 to 120V (50 / 60 Hz) or 200 to 240V (50 / 60 Hz)			
Power	600 Watts		1000 Watts	
Dimensions	Height 302mm Width 176mm Depth 262mm			
Weight	8.5kg	14kg	8.5kg	18kg

### Gemini



### Calibration and Uncertainty

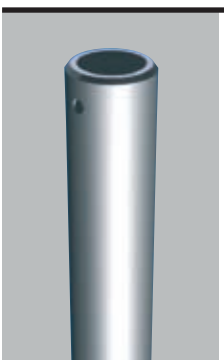
A certificate, traceable to National Standards, is included as standard. Recommended is an optional UKAS five-point calibration.

The accuracy will depend very much on the mode of use and the types of sensor to be used. Please contact Isotech for tutorials and uncertainty calculations and comprehensive evaluation reports. The Gemini<sup>PLUS</sup> 550/700/500LRI/700LRI meet the Calibration Capacity requirements of EURAMET/cg-13/v.01, "Guidelines on the Calibration of Temperature Block Calibrators".



**UKAS Calibration** available for these systems - *International Traceability - Best Practice*

# Accessories - Gemini



**Metal Block Sleeves**

**Gemini<sup>PLUS</sup> 550**  
Set of four Sleeves to suit the block. Optional single hole sizes 4, 6, 8, 10, 12, 14mm diameter all 150mm deep.

**857-07-01** Undrilled sleeves for local machining.

**857-07-03** 1 sleeve with 2 holes 4.5mm x 150mm deep.

**Gemini<sup>PLUS</sup> 700**  
Set of four Sleeves to suit the block. Optional single hole sizes 4, 6, 8, 10, 12, 14mm diameter all 150mm deep.

**857-07-02** Blank sleeves for local machining.

**857-07-04** 1 sleeve with 2 holes 4.5mm x 150mm deep.

**Note:** The use of sleeves will introduce an additional thermal gradient into the block. This can be avoided by using the LRI model with a block drilled for specific probes.



**Removable Inserts**

**Gemini<sup>PLUS</sup> 550 LRI**

**976-07-01a** Included as Standard Removable insert with eight 8mm pockets

**976-07-01b** Blank Insert Insert without pockets for local machining

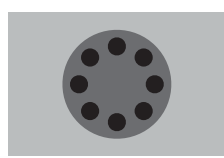
**976-07-01c** Custom Insert Contact Isotech with your requirements

**Gemini<sup>PLUS</sup> 700 LRI**

**976-07-02a** Included as Standard Removable block with eight 8mm pockets

**976-07-02b** Blank Insert Insert without pockets for local machining

**976-07-02c** Custom Insert Contact Isotech with your requirements



**UKAS Calibration**  
UKAS Calibration available to order, legally traceable in more than 70 countries.



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**Standard Probe**

**935-14-72/DB** Platinum Resistance Thermometer for use up to 650°C.

**935-14-63** Type N Thermocouple for use up to 700°C.



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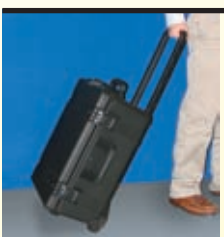
**Carrying Case**

**931-22-64** Purpose designed carrying case. Ideal for storing the calibrator and accessories



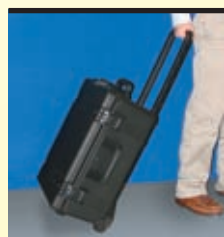
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**Transit Case**

**931-22-105** Resin case with inline wheels and pull out handle. Ideal for transporting the calibrator



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**How To Order**  
Specify Model, Version, Basic or Site, Supply Voltage, Accessories and if UKAS Calibration is required.