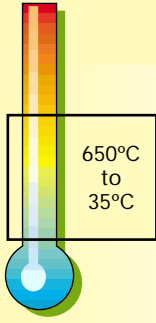


# Jupiter<sup>PLUS</sup> 650

## Dry Block Calibrator



The Jupiter<sup>PLUS</sup>650 Dry Block range offers industry-leading performance in an easy to use portable package - ideal for the calibration of thermocouples and platinum resistance thermometers. It has been designed for fast heating and cooling for convenient field use. For flexibility surface sensor and infrared thermometer accessories can be added.

The standard insert can hold up to six thermometers. For larger blocks see the Gemini and Medusa models. The Jupiter<sup>PLUS</sup>650 is available in two models, the BASIC (B) and the SITE (S). The B model includes a sophisticated temperature controller with a dual display for Set Temperature and Dry Block Temperature.

The S model 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 Surface Sensor and Blackbody use an external thermometer should always be used. For lab accuracy the Jupiter<sup>PLUS</sup>650 can be used with a high-end temperature indicator such as one of the Isotech True Temperature Indicators (TTI).

Includes as standard: Windows Software, Computer Interface and a Ramp to Set Point Feature. Increased resolution of  $\pm 0.01$  available throughout the range via the PC interface and from 0.01 to +99.99 locally on the auto-ranging front display. The controller features multi-point block to display correction giving good absolute accuracy.

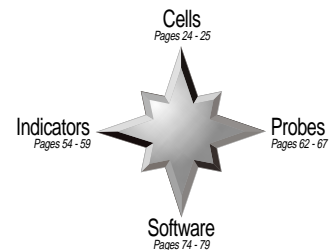


The S model has universal sensor input allowing Platinum Resistance Thermometers, Thermocouples (Types K, N, R, S, L, B, PL2, T, J and E) along with Linear Process Inputs including 4-20mA current transmitters to be displayed on the inbuilt indicator. The indicator can be programmed with up to five calibration points to provide high accuracy digital probe matching. The indicator and controller are both addressable over the communications link.

**New!** The Site model can now be used with the supplied Cal Notepad software to test thermostats.

### Key Features




- **Calibrate Whole Calibration Loop** - using a heat source rather than an electrical simulator a test instrument and probe can be calibrated as a system.
- **Good Temperature Uniformity**  
Careful design and research allows use of a high conductivity heater block to give the best temperature uniformity.
- **Wide Operating Range**  
Fast response from 35°C to 650°C ideal for field use.
- **Simple To Use** - Outstanding Value for Money!
- **S Model Includes Universal Input Temperature Indicator** allowing for up to five "correction" points to be programmed.
- **Windows Software and PC Interface as Standard.**
- **Free Evaluation Report** - ask for full data or visit [www.isotech.co.uk/industrial](http://www.isotech.co.uk/industrial).



# Jupiter<sup>PLUS</sup> 650

## Dry Block Calibrator

### Options

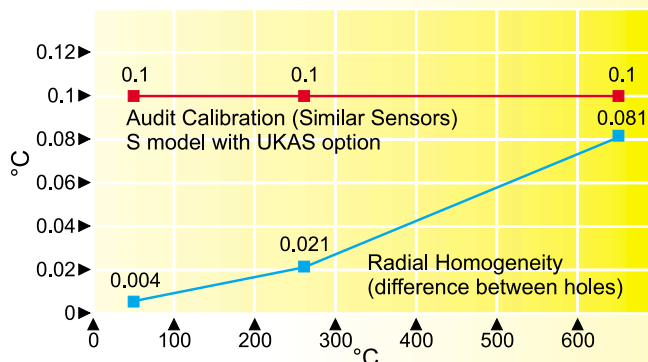
	Metal Block Insert	852-07-11	Standard Insert <i>Included</i>
		852-07-07	Blank Insert <i>Insert without pockets for local machining</i>
		852-07-07C	Special Insert <i>Contact Isotech with your requirements</i>
<b>Alternative Metal Block Inserts</b>			
		852-09-03	Standard Insert type B 13mm, 10mm, 8mm, 5mm and 3.5mm diameter holes, all 140mm deep
			852-09-04
Blackbody Kit	852-09-01	Includes a Blackbody target and Sensor	
Surface Sensor Kit	852-07-15	Includes an Insert and angled thermocouple	
UKAS Calibration	UKAS Calibration available to Order		
Air Cooling	853-04-02	For use with a compressor this accessory allows air to be blown into the block for rapid cooling.	
Standard Probe	935-14-72	Platinum Resistance Thermometer for use up to 650°C	
Carrying Case	931-22-64	Sturdy case accommodates the unit with room for accessories	

### 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 Jupiter<sup>PLUS</sup> 650 meets the Calibration Capacity requirements of EA 10/13, "EA Guidelines on the Calibration of Temperature Block Calibrators".

### JUPITER<sup>PLUS</sup> 650 Performance



For Evaluation Reports, Uncertainty Budgets and Calculations with regard to EA10-13 UKAS etc, please contact Isotech - also <http://www.isotech.co.uk/refer.html>

<b>Model No.</b>	JUPITER <sup>PLUS</sup> 650	
<b>Temperature Range</b>	35°C to 650°C	
<b>Absolute stability over 30 minutes</b>	At 50°C	±0.02°C
	At 250°C	±0.02°C
	At 650°C	±0.03°C
	Blackbody Source	±0.3°C
	Surface Sensor Calibrator	±0.5°C
<b>Computer Interface</b>	Included with Windows Software (page 74)	
<b>Cools from</b>	650°C to 150°C in 60 minutes	
<b>Heats from</b>	30°C to 650°C in 20 minutes	
<b>Best Performance</b>	See Graph	
<b>Calibration volume</b>	35mm diameter by 148mm deep	
<b>Standard Insert</b>	6 pockets, 2 x 4.5mm, 2 x 6.4mm, 1 x 8.0mm, 1 x 9.5mm diameter, all 140mm deep	
<b>Display Resolution</b>	0.01 to 99.99	
	0.1 100.0 to 650.0	
	PC can display 0.01 across whole range with the software included	
<b>Indicator units</b>	°C, °F, K	
<b>Power</b>	100 to 120V (50 / 60 Hz) or 200 to 240V (50 / 60 Hz) 1000 Watts	
<b>Overall dimensions</b>	Height	302mm
	Width	176mm
	Depth	262mm
<b>Weight</b>	8.5kg	
<b>How to Order</b>	Jupiter <sup>PLUS</sup> 650 Please specify model type required Please specify voltage required Please specify options required	