

Jupiter 650

Dry-Block Calibrator

The Jupiter 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.

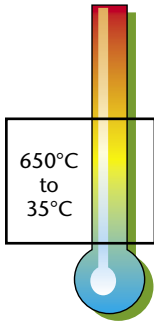
The standard insert can hold up to five thermometers, or any custom insert can also be provided. For larger blocks see the Gemini and Medusa models. The Jupiter 650 is available in two models, the BASIC and the SITE. The BASIC model includes a sophisticated temperature controller with a dual display for Set Temperature and Dry Block Temperature.

The SITE 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 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 ± 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 excellent absolute accuracy.

The SITE 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 built-in 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.

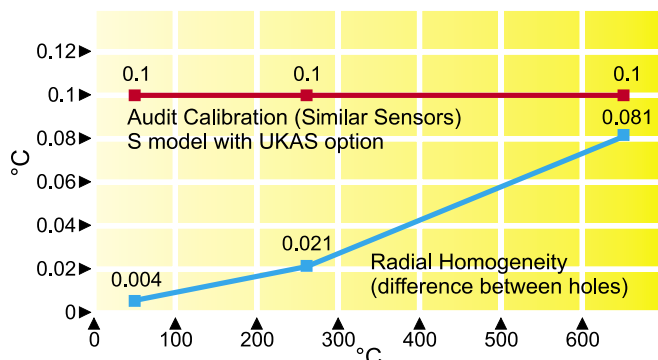
New! The SITE model can now be used with the supplied Cal Notepad software to test thermostats.



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 the Money!
- **SITE 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.isotechna.com

JUPITER 650 Performance



Calibration and Uncertainty




A certificate, traceable to NIST, is included as standard.

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 650 meets the Calibration Capacity requirements of EA 10/13, "EA Guidelines on the Calibration of Temperature Block Calibrators".

SPECIFICATIONS

Model	Jupiter 650
Temperature Range	35°C to 650°C
Dry Block Accuracy	±0.3°C Throughout entire range
Absolute Stability Over 30 Minutes	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
Computer Interface	Included with Windows Software
Cooling Time	650°C to 150°C in 60 minutes
Heating Time	30°C to 650°C in 20 minutes
Best Performance	See Graph
Calibration Volume	35mm diameter by 148mm deep
Display Resolution	0.01: to 99.99 0.1: 100.0 to 650.0 PC can display 0.01 across whole range with the software included
Indicator Units	°C, °F, K
Power	110 VAC ±10% (50 / 60 Hz) 1000 Watts
Overall Dimensions	302mm x 176mm x 262mm (HxWxD)
Weight	18.7 lbs (8.5kg)

ACCESSORIES

 Type B	852-09-INA:	Standard Insert type B 5 pockets, 1/8"; 3/16"; 1/4"; 3/8"; 1/2", all 140mm deep
	852-07-07:	Blank Insert. <i>Insert without pockets for local machining</i>
 Type A	852-07-11:	Type A 13mm, 10mm, 8mm, 5mm and 3.5mm diameter holes, all 140mm deep
	852-09-04:	Special Insert type C 8mm, 6 x 6.5mm diameter holes, all 140 deep
 Type C	852-09-01:	Includes a Blackbody target and Sensor
	852-07-15:	Includes an Insert and angled thermocouple
NIST Calibration		NIST Calibration free with purchase
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

HOW TO ORDER

Jupiter 650	Dry Block Calibrator, BASIC Model
Jupiter 650-SITE	Dry Block Calibrator, SITE Model