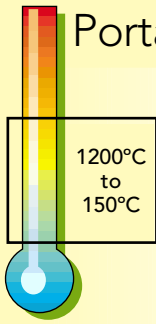# ISOTECH

Pegasus^{PLUS} 1200

Portable Calibration Furnace

1200°C
to
150°C

The Pegasus^{PLUS} range offers extreme high temperature calibration in an easy to use portable package - ideal for the calibration of high temperature thermocouples. It has been designed for fast heating and finds applications in the glass, electrical power, automotive and material processing industries. A Blackbody target can be added for the calibration of infrared thermometers.

The standard insert has four 8mm pockets 80mm deep. The metal insert is strategically placed beneath 50mm of insulation to provide optimal performance over the radiant temperature range. For larger blocks see the Oberon model. The Pegasus is available in two models, the BASIC (B) and the SITE (S). The B model should be used with an external reference probe and indicator, such as the TTI 5. The thermocouples under test should be calibrated by *comparison* to the external probe.

The S model includes a built in digital indicator to which an external standard thermometer should be connected, giving greater accuracy eliminating temperature gradient and loading errors. The recommended probe is a platinum Type R thermocouple. The optional Blackbody target is used with a specially angled Type R thermocouple that sits immediately behind the target area.
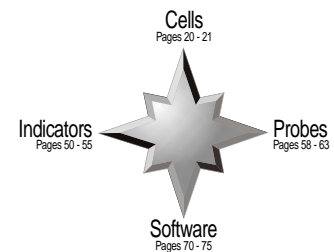
Includes as standard: Windows software, computer interface. Increased resolution of ±0.1 available throughout the range via the PC interface and from 150.0 to 999.9 locally on the auto-ranging front display. The controller features multi-point block to display correction giving good absolute accuracy.

New in the S model is 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.

Plus FEATURES

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.

● **Custom furnace design -** provides fast heating with optimised thermal profile

● **High Operating Range**
Portable field use up to 1200°C

● **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

Pegasus^PLUS 1200

Portable Calibration Furnace

Options

Metal Block Insert	853-06-01	Standard Insert *Included*
	853-06-02	Blank Insert *Insert without pockets for local machining*
	853-06-02b	Special Insert *Contact Isotech with your requirements*

| Blackbody Kit | 853-06-03 | Includes a Blackbody target and Sensor |

The Pegasus 1200 has to be used with the target vertical. Databook 4 includes the Pegasus 1200R which is suitable for horizontal operation

| UKAS Calibration | | UKAS Calibration available to Order (S models only) |

| Air Cooling | 853-04-02 | For use with a compressor this accessory allows air to be blown into the block for rapid cooling. |

| Ceramic Insulators | 853-06-04 | Spare insulation pack Includes 2 x standard tops and 2 x standard bottoms |

| Standard Probe | 935-14-91 | Type R Platinum Thermocouple for use up to 1200°C |

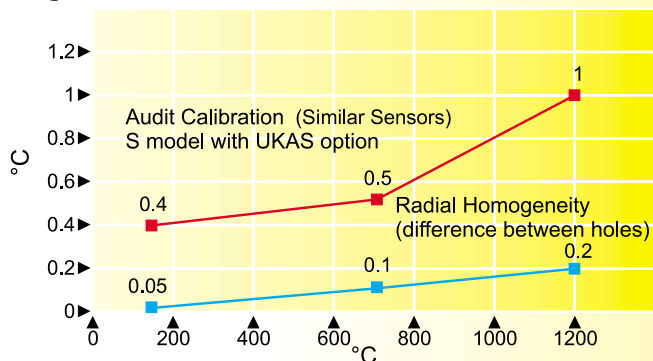| Carrying Case | 931-22-27 | Sturdy case accommodates the unit with room for accessories |

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 Pegasus^PLUS 1200 meets the Calibration Capacity requirements of EA I0/13, "EA Guidelines on the Calibration of Temperature Block Calibrators".

Pegasus^PLUS 1200 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

Model No.	PEGASUS^PLUS 1200
Temperature Range	150°C to 1200°C
Absolute stability over 30 minutes	At 150°C ±0.1°C At 1200°C ±0.2°C Blackbody Source ±0.3°C
Computer Interface	Included with Windows Software (page 72)
Cools from	1200°C to 800°C in 50 minutes* 1200°C to 200°C in 180 minutes* *substantially reduced by the cooling adaptor
Heats from	100°C to 1200°C in 20 minutes
Best Performance	See Graph
Calibration volume	33.5mm diameter by 130mm deep
Standard Insert	4 pockets, 8.0mm diameter by 80mm deep
Display Resolution	0.1 to 999.9 1 1000 to 1200 PC can display 0.1 across whole range with the software included
Indicator units	°C, °F, K
Power	100 to 120V (50 / 60 Hz) or 200 to 240V (50 / 60 Hz) 2300 Watts
Overall dimensions	Height 302mm Width 176mm Depth 262mm
Weight	8.5kg
How to Order	Pegasus^PLUS 1200 Please specify model type required Please specify voltage required Please specify options required