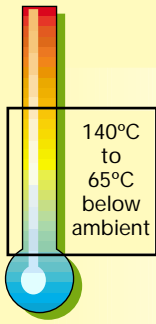


Europa-6^{PLUS}

ISOCAL-6[®] Range



The EUROPA^{PLUS} offers an exceptionally wide operating range in an easy to use portable package. As part of the ISOCAL-6 series the EUROPA^{PLUS} can be used as a Dry Block, a Liquid Bath, a Blackbody Source for infrared thermometers, a Surface Sensor Calibrator and for performance to a few mK (0.001°C) ITS-90 Fixed Points. The EUROPA^{PLUS} 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, refer to page 27 for further details. The S model additionally includes an in-built digital indicator to which an external temperature sensor can be connected.

For Dry Block use the unit under test may be compared to the controller value, Isotech recommend the use of an external probe connected to the indicator of the Site model (see page 23) which compensates for the temperature gradient and loading errors. This gives greater accuracy and traceability meeting the requirements of ISO 9000 and other quality standards.

For liquid bath, surface sensor and blackbody use an external standard probe should always be used, either with the S models indicator or an external indicator, e.g. an Isotech TTI model. For laboratory use the EUROPA^{PLUS} can be used with a laboratory performance 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 -19.99 to +99.99 locally on the auto-ranging front display. The controller features multi-point block to display correction giving good absolute accuracy.

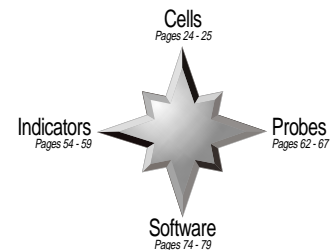


The S model has universal sensor input allowing Platinum Resistance Thermometers, Thermocouples (Types K, N, R, S, L, B, PL2, T, J and E) along with Linear Process Inputs including 4-20mA current transmitters to be displayed on the inbuilt indicator. The indicator can be programmed with up to five calibration 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

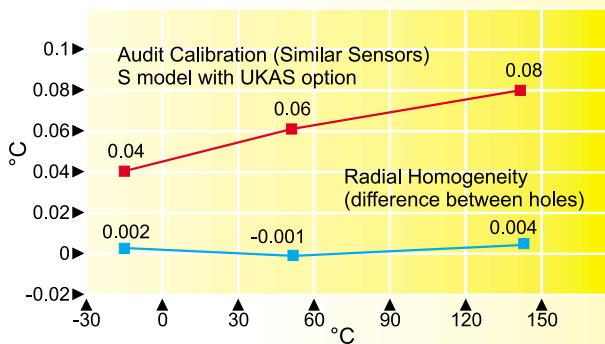
- **Extreme Low Temperature Operation**
-45°C in an ambient of 20°C - Use for Triple Point of Mercury, 0°C, 121°C (250°F), 135°C.
- **Realise ITS-90 Fixed Points -**
the EUROPA^{PLUS} can be used with Slim Mercury, Gallium and Triple Point of Water Fixed Point Cells.
- **Calibrate as a Dry or Liquid Bath,**
thermocouples, platinum resistance thermometers, thermistors, liquid in glass, thermostats, semiconductor types.
- **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



Europa-6^{PLUS}

ISOCAL-6[®] Range

EUROPA^{PLUS} 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. EUROPA^{PLUS}

Temperature Range 65°C below ambient to +140°C (absolute minimum -55°C)

Absolute stability over 30 minutes	Dry Block Bath	
	Stirred Liquid Bath	
		±0.025°C
	Ice/Water Bath	
		±0.001°C
	Blackbody Source	
		±0.3°C
	Surface Sensor Calibrator	
		±0.5°C
	ITS-90 Fixed Point Apparatus	
		±0.0005°C

Computer Interface Included with Windows Software (page 74)

Cools from 140°C to 0°C in 15 minutes

Heats from -30°C to 140°C in 15 minutes

Best Performance See Graph

Calibration volume 35mm diameter by 160mm deep

Standard Insert 6 pockets, 9.5mm, 8.0mm, 6.4mm, 6.4mm, 4.5mm, 4.5mm, all 157mm deep

Uniformity ±0.018°C

Display Resolution 0.01 -19.99 to 99.99
0.1 -55.0 to -20.0 and 100.0 to 140.0
PC can display 0.01 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)
300 Watts

Overall dimensions Height 322mm
Width 176mm
Depth 262mm


Weight 14kg

How to Order EUROPA-6^{PLUS}
Please specify model type required
Please specify voltage required
Please specify options required

Options

	1. Metal Block Insert	951-02-15	Standard Insert <i>Included</i>
		951-02-15A	Blank Insert <i>Insert without pockets for local machining</i>
		951-02-15C	Special Insert <i>Contact Isotech with your requirements</i>

Alternative Metal Block Inserts

	951-06-07	Standard Insert type B 13mm, 10mm, 8mm, 5mm and 3.5mm diameter holes, all 157mm deep
	951-06-08	Special Insert type C 8mm, 6 x 6.5mm diameter holes, all 157 deep

2. Stirred Liquid Bath	951-06-01	Includes a container, magnetic stirrer and probe guide <i>Allows three thermometers to be suspended in the bath, including liquid in glass types</i>
3. Water/Ice Bath		
Thermometer Support Kit	951-06-03	
Oil	951-06-06	0.1L 20°C to 140°C

4. Blackbody Target	951-06-04	Use with Standard Probe (935-14-82)
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5. Surface Sensor Kit	951-06-02	Includes an Insert and an angled PRT.
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6. Fixed Point Cells	17724 Slim	Mercury Slim Cell
	D8	Water Slim Cell
	17401 Slim	Gallium Slim Cell

Standard Probe	935-14-82	Platinum Resistance Thermometer
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UKAS Calibration	UKAS Calibration available to Order	
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Carrying Case	931-22-64	Sturdy case accommodates the unit with room for accessories
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To see the ISOCAL-6 in use ask for our 27 minute video supplied on CD-Rom

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 Europa^{PLUS} meets the Calibration Capacity requirements of EA 10/13, "EA Guidelines on the Calibration of Temperature Block Calibrators".