

140°C

to 65°C

below

ambient

Europa-6PLUS

# **ISOCAL=6**<sup>®</sup> Range

The EUROPA<sup>PLUS</sup> offers an exceptionally wide operating range in an easy to use portable package. As part of the ISOCAL-6 series the EUROPA<sup>PLUS</sup> 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<sup>PLUS</sup> 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<sup>PLUS</sup> 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<sup>PLUS</sup> 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







Options	
---------	--

Options				
1. Metal Block Insert	951-02-15 951-02-15A	Standard Insert Included Blank Insert		
	951-02-15C	Insert without pockets for local machining Special Insert Contact Isotech with your requirements		
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 Stirrod Liquid Bath	951-06-01	Includes a container,		
<ol> <li>Stirred Liquid Bath</li> <li>Water/Ice Bath</li> <li>Thermometer Support Kit</li> </ol>	951-06-03	magnetic stirrer and probe guide Allows three thermometers to be suspended in the bath, including liquid in		
Oil	520-05-01	glass types 0.1L -35°C to 140°C		
4. Blackbody Target	951-06-04	Use with Standard Probe (935-14-82)		
5. Surface Sensor Kit	951-06-02	Includes an Insert and an angled PRT.		
6. Fixed Point Cells	17724 Slim B8 17401 Slim	Mercury Slim Cell Water Slim Cell Gallium Slim Cell		
Standard Probe	935-14-82	Platinum Resistance Thermometer		
UKAS Calibration	UKAS Calibr	ration available to Order		
Carrying Case	931-22-64	Sturdy case accommodates the unit with room for accessories		



To see the ISOCAL-6 in use ask for our 27 minute video supplied on CD-Rom

#### **Calibration and Uncertainty**

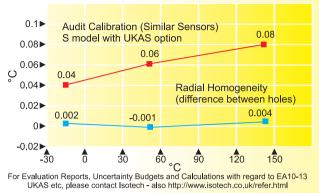
A certificate, traceable to National Standards, is included as standard. Recommended is an optional UKAS five-point calibration.

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<sup>PLUS</sup> meets the Calibration Capacity requirements of EA I0/13, "EA Guidelines on the Calibration of Temperature Block Calibrators".

# Europa-6<sup>PLUS</sup>

ISOCAL•6® Range

## EUROPA<sup>PLUS</sup> Performance



Model No. EUROPAPLUS

Temperature Range	65°C below ambient to +140°C (absolute minimum -55°C)			
Absolute stability over 30 minutes	Dry Block Bath Stirred Liquid Bath Ice/Water Bath Blackbody Source Surface Sensor Calibrator ITS-90 Fixed Point Apparatus	±0.03°C ±0.025°C ±0.001°C ±0.3°C ±0.5°C ±0.0005°C		
Computer Interface	Included with Software			
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 PC can display 0.01 acr range with the software	oss whole		
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 <sup>PLUS</sup> Please specify model type required Please specify voltage required			

Please specify options required