ISOTECH

-25 to 250°C ACROSS RANGE

NEW
ISOCAL - 6 Range
Advanced Hyperion • Drago

- Advanced Features including inbuilt three channel temperature indicator
- Portable Liquid Bath with large 65mm volume
- Convertible for Dry Block and multi-function use

The Hyperion and Drago have large calibration volumes, 65mm x 160mm deep, which makes them ideal to use as portable liquid baths. Stirred liquid baths are suitable for temperature sensors of all types, sizes and shapes. Liquid Baths can provide smaller calibration uncertainties than dry blocks and, when used with suitable reference thermometers, accuracies of up to 0.005°C can be achieved.

These models are part of the award winning Isocal-6 family and with a reference probe can be used with different accessories for Dry Block, Infrared, Surface Calibration and even with ITS-90 Fixed Point Cells for uncertainties to 0.001°C. In Dry Block Mode the large 65mm diameter block allows for the calibration of either larger probes or for calibrating many sensors simultaneously.

As a Liquid bath the sensors can be placed directly into the stirred liquid thus avoiding the need for specially drilled blocks. If the liquid is directly in the block then the controller only model, or Basic (B) model, can be selected. However, instead of putting liquids directly in the block liquid containers can be used to facilitate rapid change of fluids. For greater accuracy, or when using a Liquid Container, Dry Block Insert, Blackbody Target or the Surface Sensor Kit a separate reference thermometer should be used to compensate for the varying offset between the controller and the accessory temperature.

I-Cal EASY calibration software can be added to create a powerful solution for the automatic calibration of thermometers.

These new ADVANCED models offer a wide range of features and benefits including an independent three

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channel temperature indicator allowing test probes to be compared to a reference probe. Calibration temperatures can be stored and programmed in for automatic temperature cycling and data logging. The latest technology is used to deliver superior stability, greater accuracy and best performance.

World's First Multi-Functional Baths
SIX FUNCTIONS

ISOCAL-6
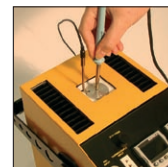## LIQUID & DRY BLOCK

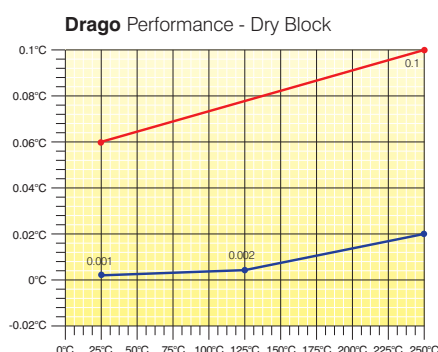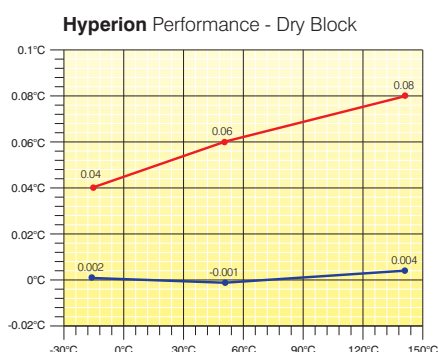| Black Body | Block Bath | | Ice Bath | ITS - 90 | Liquid Bath | Surface Sensor |

ADVANCED SPECIFICATIONS

Parameter	Model	
	Hyperion 4936	**Drago 4934**
Temperature Range	-25°C to 140°C [1]	30°C to 250°C [2]
Stability	Liquid Bath: ±0.005°C Dry Block: ±0.005°C	Liquid Bath: ±0.01°C Dry Block: ±0.01°C
Resolution	0.001°C Over Full Range	0.001°C Over Full Range
Display Accuracy [3]	0.15°C	0.15°C
Uniformity - Radial, Liquid Bath Mode	<0.009°C	<0.007°C
Uniformity - Axial, Liquid Bath Mode (40mm)	<0.011°C	<0.013°C
Uniformity - Radial, Dry Block Mode (Between Wells)	<0.008°C	<0.008°C
Uniformity - Axial, Dry Block Mode (40mm)	<0.040°C	<0.040°C
Heating Time	-20°C to 140°C: 40 Mins	30°C to 250°C: 40 Mins
Cooling Time	140°C to 20°C: 90 Mins 20°C to -25°C: 80 Mins	250°C to 30°C: 90 Mins
Calibration Volume	65 x 160mm	
Standard Insert	8 x 8mm Pockets and 2 x 4.5mm, all 157mm deep	
Input Channels	Full range of inputs and accuracies with calibration options available online	
PC Interface	Ethernet - supporting software and USB Host	
Power	115Vac or 230Vac 50/60Hz 200 Watts	115Vac or 230Vac 50/60Hz 1000 Watts
Dimensions	335H x 208W x 307D mm	
Weight	12kg	8kg

(1) In ambient of 20°C: Minimum Temperature is 45°C Below Ambient, Absolute Minimum -35°C
(2) In ambient of 20°C
(3) Dry Block Mode only: Comparing 4.5mm Well to Controller Display Value.

ADVANCED FEATURES

- Digital Display of Set and Nominal Block Temperature
- PC Interface: Ethernet (Optional Serial Legacy Kit available)
- Two channel thermostat testing
- Inbuilt Temperature Indicator for Reference Probe and two universal inputs for PRT, Thermocouple or Process inputs and a further Thermocouple input
- Automatic Temperature Cycling - Create Programs from front panel or on PC with included software
- Data Logging with export to USB
- Offset Elimination - block can follow reference input
- Speaks five languages: English, French, German, Italian and Spanish
- In Built Web Server
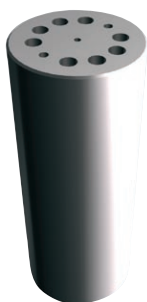- Tamper Proof Data - in accordance with 21CFR, Part 11.

Hyperion Performance - Dry Block

Drago Performance - Dry Block

■ Audit Calibration (Similar Sensors)

■ Radial Homogeneity

See Evaluation Reports for full details
http://www.isotech.co.uk

Isocal-6 Ultimate Flexibility - Hyperion & Drago

Calibrate all sensor types - Thermocouples, PRT's, Thermistors, Thermostats, Infrared, Surface Sensors...

① Dry Block Mode with Inserts

936-06-01a Standard Insert is:
8 x 8mm + 2 x 4.5mm all 157mm Deep.

All Inserts have a 4mm tapped hole to suit supplied extractor tool.

Alternative Inserts

936-06-01b   Blank Insert

936-06-01c   Special Insert.
Contact Isotech with your requirements.

② Stirred Liquid Mode with Liquid Container Kit

Hyperion and Drago are ready to use as portable liquid baths. To get started simply add a suitable liquid into the unit and you are ready to go. We include a magnetic stirrer, probe basket and sealing lid.
Add a Liquid Container Kit to facilitate rapid change of liquids, the liquid now goes into the removable container rather than directly into the block. Includes container, magnetic stirrer, probe guide and sealing cap.
936-06-02

③ Stirred Ice Bath Mode with Liquid Container Kit

Uses same liquid kit to provide 0°C reference as a stirred ice bath.

Additional Accessories for use with the above kit

Thermometer Support Kit
936-06-08   Supports up to eight thermometers into liquid. Suits probes 5mm - 8mm in diameter.

Oils
936-06-07   C10 Oil   -35°C - 140°C 1L
580-06-09   C20 Oil   20°C - 200°C 1L
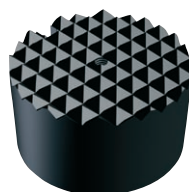**915/09**   VH Oil   150°C - 250°C 1L

Calibration

Includes three point traceable calibration certificate for block temperature

UKAS Calibration

Recommended: Options for block temperature and reference thermometer inputs (simulation).

Legally traceable in more than 70 countries.

④ Infrared Calibration Mode with Blackbody Target

936-06-03   Use optional Probe 936-14-61DB.

⑤ Surface Sensor Calibration with Surface Sensor Kit

936-06-04   Includes an Insert and an angled platinum resistance thermometer.

⑥ ITS-90 Fixed Point Cells

B8   0.01°C Water Triple Point Cell (Hyperion)

17401 Slim   29.7648°C Gallium Slim Cell

936-06-09   Cell Holder Assembly

Standard Probe

935-14-61/DB Platinum Resistance Thermometer.
Probe diameter 4mm, recommended pocket size 4.5mm.

Current Loop Interface

935-06-161   24VDC Power Supply and Terminal Box. Powers 4-20mA Current Transmitters with 4mm terminal posts for easy connection.

Carrying Case

931-22-111   Sturdy case with room for accessories. Features wheels and pull out handle.

The world's leading National Metrology Institutes choose Isotech - shouldn't you?

Isotech manufacture the widest range of temperature calibration equipment from hand held thermometers to Primary Standards. With Isotech solutions you can expand your equipment no matter what the requirement.

Isotech have been pioneering the latest developments in Temperature Metrology for more than 30 years, benefit from our know how, experience and global network.

Hyperion & Drago Benefits

Excellent Uniformity

■ The Hyperion uses specially designed thermoelectric heat pumps positioned in four heating / cooling zones around the block.

The Drago has four heating areas evenly distributed for optimum uniformity.
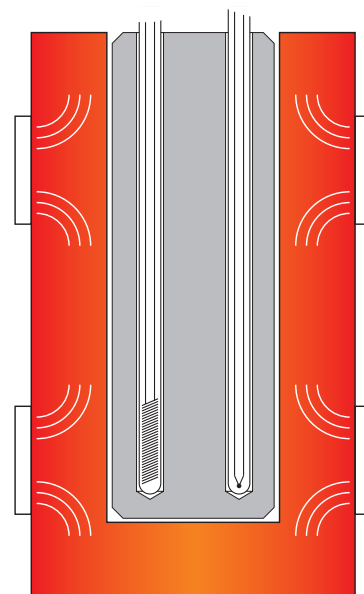
Excellent Stability

■ The Advanced model automatically compensates for power fluctuations and features advanced PID algorithms with digital filtering to deliver world class control and superior stability.

Calibrate More Sensors

■ Industry leading 65mm diameter well allows for larger probes, or a greater number of smaller probes allowing you to calibrate more sensors.
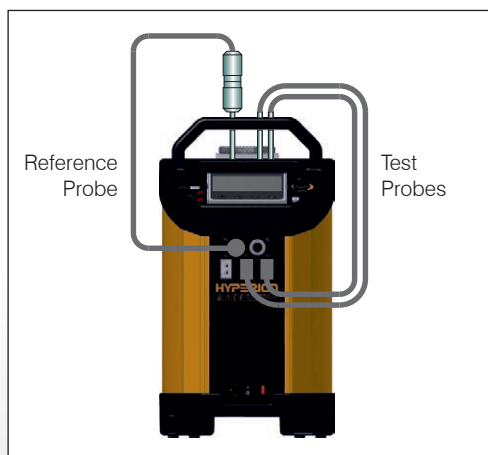
The Isotech website includes ISOCAL-6 video demonstrations

Four distributed heat/cooling zones for optimum uniformity

Calibrating with an Advanced Model

Reference Probe

Test Probes

ADVANCED Model

The ADVANCED model includes an indicator with channels for both a reference probe and units under test. This allows best practice calibration with established traceability and uncertainty. Advanced features include automatic temperature cycling and logging.

How To Order

1 - Select Desired Options Iead Accessories
2 - Supply Voltage:
    Specify either 115Vac 50/60hz or 230Vac 50/60Hz