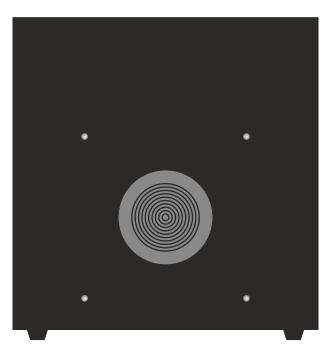
Blackbody Source





Description

This blackbody source is particularly suitable for the calibration of thermal imagers.

It comprises a heat / cool ridged blackbody source of 70mm diameter whose temperature can be set from 20°C to 45°C to a resolution of 0.1°C.

Features

Combined stability / accuracy of ±0.2°C using contact thermometry.

Emissivity is better than 0.97 ± 0.02 .

Evaluation at **Land Pyrometers** showed the advantages of fitting a stainless steel tube around the plate to give better uniformity and less sensitivity to draughts and ambient temperature effects.





Model No. 988 20°C to 45°C Temperature (70°F to 115°F) Range ±0.1°C Resolution **Target Size** 70mm diameter Greater than 0.97 ± 0.02 **Emissivity** ±0.2°C Combined Accuracy / Stability $(\pm 0.3^{\circ}F)$ 70W Power 12 V.D.C. Voltage **Dimensions** Height 230mm Width 225mm Depth 115mm Weight 4kg Accessories Switch Mode Power Supply Supplied as Standard How to Order 988

Altering the Block Temperature, (Setpoint)

- 1. Switch the unit on. The power switch is located on the front panel.
- 2. After Power Up the nominal temperature will be shown on the display.



- 3. To display the set point (the desired temperature) press ★.
- 4. To increase the set point: Press **★ △** together.
- 5. To decrease the set point: Press ★ ▼together.



The other controller functions are hidden from the operator. The values are pre-set and should not be changed.



Safe Use

Do not use in wet or damp environments.

Care should be taken to avoid handling the calibration area when hot - Risk of Burns - Keep flammable items away.

Cool before placing in carry case.

No liquids should be used.

Read this instruction leaflet before use.

No user Serviceable parts, do not dismantle.

Not for use in Hazardous Areas.

Disconnecting device: The 988 Blackbody can be isolated by removing the power cable.



Cautionary Note

Failure to follow these instructions could result in fatal injury or cause damage to the product.

Isotech products are intended for use by technically trained and competent personnel familiar with good measurement practices.

It is expected that personnel using this equipment will be competent with the management of apparatus which may be powered or under extremes of temperature, and are able to appreciate the hazards which may be associated with, and the precautions to be taken with, such equipment.



The 988 Blackbody's optional power supply is provided with an approved power cord. If the plug is not suitable for your location then the plug should be removed and replaced with an appropriate plug.

Take care to ensure the old plug is disposed safely. The cable is colour coded as follows:

COLOUR	FUNCTION
Green / Yellow	Earth (Ground)
Brown	Live (Line)
Blue	Neutral

Please ensure that your unit is correctly connected to the electricity supply.



WARNING Do not remove the panels.

There are no user serviceable parts inside.

Contact your nearest Isotech agent for repair.



Unpacking and Initial Inspection

Our packing department uses custom designed packaging to send out your unit, after unpacking the unit, to inspect it for any sign of shipping damage, and confirm that your delivery is in accordance with the packing note. If you find any damage or that part of the delivery is missing please notify us or our agent, and the carrier immediately. If the unit is damaged you should keep the packaging for possible insurance assessment.



Trouble Shooting

Error Message What it Means What to Do

dAtA: FAiL Memory Error Cycle Power; If the error message persists

contact Isotech or supplier for advice.

inPt: FAiL Control Sensor Fault Contact Isotech or supplier for advice.



EMC INFORMATION

This product meets the requirements of the European Directive on Electromagnetic Compatibility (EMC) 89/336/EEC as amended by EC Directive 92/31/EEC and the European Low Voltage Directive 73/25/EEC, amended by 93/68/EEC.

The product meets the susceptibility requirements of EN 50082-1, criterion B.

System Identification	Publication	Description
	ISO3864	Caution (Refer to this leaflet)
	IEC 417	Caution Hot Surface



Warning: Do not remove the panels.

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Voltage transients on the supply must not exceed 2.5kV.

Conductive pollution, eg Carbon dust, must be excluded from the apparatus. EN61010 pollution degree 2.

Environmental Ratings

Operating Temperature 5 - 35°C

Relative Humidity 5 - 95%, non condensing



GUARANTEE

This instrument has been manufactured to exacting standards and is guaranteed for twelve months against electrical break-down or mechanical failure caused through defective material or workmanship, provided the failure is not the result of misuse. In the event of failure covered by this guarantee, the instrument must be returned, carriage paid, to the supplier for examination and will be replaced or repaired at our option.

FRAGILE CERAMIC AND/OR GLASS PARTS ARE NOT COVERED BY THIS GUARANTEE.

INTERFERENCE WITH, OR FAILURE TO PROPERLY MAINTAIN THIS INSTRUMENT MAY INVALIDATE THIS GUARANTEE.

RECOMMENDATION

The life of your **ISOTECH** Instrument will be prolonged if it is kept clean and free from general dust and debris.

The company is always willing to give technical advice and assistance where appropriate. Equally, because of the programme of continual development and improvement we reserve the right to amend or alter characteristics and design without prior notice. This publication is for information only.

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