

**TECHNE**

Techne®

## Dri-Block® range

2, 3 or 4 block system

Twin control unit

New countdown timer

Adjustable safety cut-out

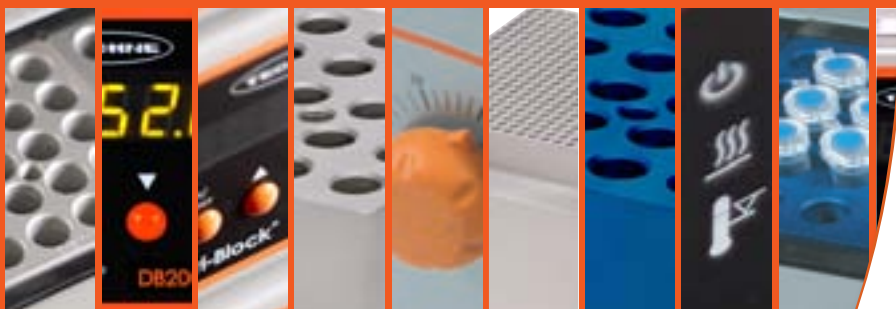
230V and 115V variants

New °C and °F units

Premium products at affordable prices

Cool-touch surfaces

New 5-digit LED display



## Techne® Dri-Block® heaters at a glance

Techne® have been manufacturing Dri-Block® heaters for almost 50 years. The 2014 model has some innovative new features and a modern new look. Techne® Dri-Block® heaters cover the temperature range from ambient +5°C to 100°C or 200°C (depending on model) using machined aluminium alloy Dri-Block® inserts as the heat transfer medium. Independent indicator lights indicate mains power, heater action and over-temperature cut-out. An On/Off switch is mounted on the rear panel, together with the mains connector and fuse holder.



### 100°C Dri-Block®

Model (230V)	DB100/4	DB100/3
Model (115V)	DB100/4/115	DB100/3/115
Number of insert blocks	4	3
5 character LED display	•	•
Working temperature range	Ambient +5°C to 100°C	Ambient +5°C to 100°C
Minimum set temperature	0°C	0°C
Set point resolution	0.1°C	0.1°C
Set point accuracy at 37°C	≤±1°C	≤±1°C
Set point accuracy at 100°C	≤±1°C	≤±1°C
Temperature stability at 37°C	≤±0.1°C	≤±0.1°C
Temperature stability at 100°C	≤±0.15°C	≤±0.15°C
Maximum temperature variation within a block	0.2°C at 37°C, 0.25°C at 100°C	0.2°C at 37°C, 0.25°C at 100°C
Maximum temperature variation between similar blocks	0.5°C at 37°C, 0.5°C at 100°C	0.5°C at 37°C, 0.5°C at 100°C
Heat up time 25°C to 100°C	7 minutes	7 minutes
Heat up time 25°C to 200°C	n/a	n/a
Audible beeps	•	•
Minimum / Maximum countdown timer	1min / 99h59min	1min / 99h59min
Safety over-temp cut-out	Thermal fuse	Thermal fuse
Overall dimensions (W x D x H), mm	356 x 260 x 105	279 x 260 x 105
Electrical supply	230V or 115V, 50-60Hz	230V or 115V, 50-60Hz
Power	600W	450W
Shipping weight	7kg	6kg
3 year warranty	•	•

## 230V Ordering Information

Part number	Model number	Description
DB100/2	DB100/2	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 2 blocks (230V)
DB100/2TC	DB100/2TC	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 2 blocks twin control (230V)
DB200/2	DB200/2	Techne Dri-Block® heater. Ambient + 5°C to 200°C, 2 blocks (230V)
DB200/3	DB200/3	Techne Dri-Block® heater. Ambient + 5°C to 200°C, 3 blocks (230V)
DB100/3	DB100/3	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 3 blocks (230V)
DB100/4	DB100/4	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 4 blocks (230V)

## Electrical safety

The Dri-Block® range has been designed to comply with RF interference and electrical safety regulations.

## Warranty

Techne® Dri-Block® heaters have earned a strong reputation for reliability. All instruments are supplied with a 3 year warranty. The anodised aluminium Dri-Block® inserts are supplied with a 1 year warranty.



100°C Dri-Block®

200°C Dri-Block®

DB100/2	DB100/2TC	DB200/2	DB200/3
DB100/2/115	DB100/2TC/115	DB200/2/115	DB200/3/115
2	2	2	3
•	•	•	•
Ambient +5°C to 100°C	Ambient +5°C to 100°C	Ambient +5°C to 200°C	Ambient +5°C to 200°C
0°C	0°C	0°C	0°C
0.1°C	0.1°C	0.1°C	0.1°C
≤±1°C	≤±1°C	≤±1°C	≤±1°C
≤±1°C	≤±1°C	≤±1°C	≤±1°C
≤±0.1°C	≤±0.1°C	≤±0.1°C	≤±0.1°C
≤±0.15°C	≤±0.15°C	≤±0.15°C	≤±0.15°C
0.2°C at 37°C, 0.25°C at 100°C	0.2°C at 37°C, 0.25°C at 100°C	0.2°C at 37°C, 0.25°C at 100°C	0.2°C at 37°C, 0.25°C at 100°C
0.5°C at 37°C, 0.5°C at 100°C	0.5°C at 37°C, 0.5°C at 100°C	0.5°C at 37°C, 0.5°C at 100°C	0.5°C at 37°C, 0.5°C at 100°C
8 minutes	8 minutes	8 minutes	9 minutes
n/a	n/a	23 minutes	19 minutes
•	•	•	•
1min / 99h59min	1min / 99h59min	1min / 99h59min	1min / 99h59min
Thermal fuse	Thermal fuse	Thermal fuse	Thermal fuse
202 x 260 x 105	279 x 260 x 105	202 x 260 x 105	279 x 260 x 105
230V or 115V, 50-60Hz	230V or 115V, 50-60Hz	230V or 115V, 50-60Hz	230V or 115V, 50-60Hz
300W	300W	300W	450W
5kg	5kg	5kg	6kg
•	•	•	•

## 115V Ordering Information

Part number	Model number	Description
DB100/2/115	DB100/2/115	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 2 blocks (115V)
DB100/2TC/115	DB100/2TC/115	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 2 blocks twin control (115V)
DB200/2/115	DB200/2/115	Techne Dri-Block® heater. Ambient + 5°C to 200°C, 2 blocks (115V)
DB200/3/115	DB200/3/115	Techne Dri-Block® heater. Ambient + 5°C to 200°C, 3 blocks (115V)
DB100/3/115	DB100/3/115	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 3 blocks (115V)
DB100/4/115	DB100/4/115	Techne Dri-Block® heater. Ambient + 5°C to 100°C, 4 blocks (115V)

## Introducing the NEW Techne® Dri-Block® range

Techne® Dri-Block® heaters have been providing a safe, dry, constant temperature source in the laboratory for 50 years. Now Techne® are proud to introduce the new, updated range offering market-leading choice, flexibility and specification. Techne® Dri-Block® heaters are a source of precision temperature control for general, routine applications and sensitive analytical procedures – particularly suited to microbiology and clinical laboratories. They are designed for precise heating of test-tubes, microcentrifuge tubes, cuvettes and microtitre plates.

## Techne® Dri-Block® applications

Applications include incubation, boiling, inactivation, wet washing, sample concentration, enzyme digestions, enzyme activity studies, nucleic acid hybridisations and many other clinical and industrial purposes. Larger three and four-block models are available for high throughput applications such as Chemical Oxygen Demand. The innovative Techne® range also includes a twin control unit, accommodating two blocks with independent digital temperature controls. Each block can be set to different temperatures - ideal for multiple users or for applications where samples have to be transferred between two temperatures very quickly.



## Countdown timer

Each digital unit features a countdown timer, which can be adjusted to time your experiment from anywhere between 1 minute and 100 hours, in 1 minute increments. To set the timer, press and hold the timer button and press the ▲ or ▼ buttons. Each press of ▲ or ▼ buttons will increase or decrease the set time by 1 minute. If the buttons are held down, the time change will accelerate to 200 min per second. Release the timer button to activate the timer. An audible beep will indicate the timer is active. When the count-down has completed, an audible beep will be heard and the display will alternate between 'End' and current temperature. Press the set/reset button to cancel the beeper. The unit will cool to ambient once the count-down time has completed. To cancel the timer, press and hold the set/reset button until 'Stop' appears and an audible beep is heard.

## Over-temperature cut-out

All new Techne® Dri-block® heaters have precision temperature control and are designed to provide many years of reliable service with a temperature stability  $\leq \pm 0.1^\circ\text{C}$ . However, all Techne® Dri-block® heaters contain a failsafe thermal fuse. The thermal fuse is a non-adjustable single-use safety device which removes power from the unit in case of malfunction. In the eventuality that the integrated block heating plate temperature reached  $192^\circ\text{C}$  in DB100 models and  $240^\circ\text{C}$  in DB200 models, the fuse will cut all power and the unit will begin to cool down. The unit would then be returned to Bibby Scientific for replacement. All Techne® Dri-block® heaters conform to the Electromagnetic Compatibility Directive (EMC), the Low Voltage Directive (LVD) and are CE marked. All models are manufactured in the UK and supplied with a 3 year warranty.

## Digital Dri-Block® key features

- Small, light and with a compact footprint; a flat top surface allows units to be stacked when in storage.
- Can hold any combination of aluminium insert blocks, depending on the model chosen.
- Digital models enable highly accurate temperature precision.
- Temperature range from ambient + 5°C to 200°C depending on the model chosen.
- Fast heat-up rate: 25°C to 100°C in 7-9 minutes, depending on the model chosen.
- Advanced temperature control. Temperature stability at 37°C ± 0.1°C.
- Outer casing is cool to the touch, even at maximum operating temperature.
- Bright orange 5-digit LED digital display for fast and accurate setting of temperature and timer.
- Temperature range from ambient to 100°C or 200°C, depending on the model chosen.
- Accurate, reproducible, rapid and safe heating of your samples.
- High quality, precision-engineered blocks provide excellent thermal contact.
- Choice of models with 2, 3 or 4 interchangeable blocks.
- Versatile range of interchangeable heating blocks to fit all popular sample tubes and plates.
- Full range of models and options for basic and advanced applications.



## Accurate temperature control

Highly accurate digital temperature control is made quick and easy with a bright 5-digit orange LED display. Each unit has a set point resolution of 0.1°C with temperature range from ambient + 5°C up to 100°C or 200°C depending on the model chosen. The Techne® Dri-Block® heaters facilitate a fast heat-up rate from 25°C to 100°C in 7-9 minutes, depending on the model chosen and all models are able to achieve a temperature stability at 37°C ± 0.1°C.

## New panel venting

Each Techne® digital Dri-Block® has venting to the side panels. Whilst helping to create a fresh modern look, the vents are designed to dissipate heat from the outer surfaces of the Dri-Block®, allowing users to safely handle and relocate their Dri-Block's® even after extended use at 100°C or 200°C.

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## Techne® Aluminium blocks

Manufactured from anodised aluminium, Techne® has the widest choice of interchangeable block inserts of any manufacturer. This allows Techne® Dri-Block® heaters to accommodate the widest variety of microtubes, test tubes, cups, plates, cuvettes and vials on the market, resulting in the most flexible Dri-Block® heater range available. Techne® Dri-Block® inserts are either single-width to accommodate a wide variety of tubes and vials, double-width to accommodate microtitre and PCR plates or triple width to accommodate select consumables. Most blocks have a separate hole to accommodate a thermometer if required. Techne® also offer a half-width plastic spacer, commonly used in the Techne® FSC496D Sample Concentrator. Technical drawings are available to download at [www.techne.com](http://www.techne.com) in the Dri-Block® page. In some cases, at additional cost, bespoke blocks can be manufactured, please contact Techne for details.

## Wide choice of blocks

For use with Techne® Dri-Block® heaters, anodised aluminium alloy blocks provide excellent thermal conductivity. Most blocks have a separate hole to accommodate a thermometer if required. Techne® Dri-Block® heaters can accommodate block inserts in any combination (size-permitting). Depending on the combination of blocks selected, plastic spacers can be employed to fill a half-width recess, ensuring optimal thermal performance. A close fitting of sample tubes ensures efficient heat transfer. The new heater design, temperature sensor and updated circuitry provide exceptionally high thermal temperature control uniformity.

## Block extraction tool

When removing aluminium blocks from the Techne® Dri-Block® heater, the process is made easier with a block extraction tool, especially if the blocks still contain some residual heat. Most blocks contain a screw-thread to facilitate quick and simple removal with the block extraction Tool. Techne® Dri-Block® heaters are supplied complete with a block extraction tool but without aluminium blocks, which are ordered separately.



## Additional accessories

Part number	Model number	Description
6101308	All models	Techne® Dri-Block® Aluminium block extraction tool

## Find out more...

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F3501



F3502



F3503



F3504



F3505



F3506



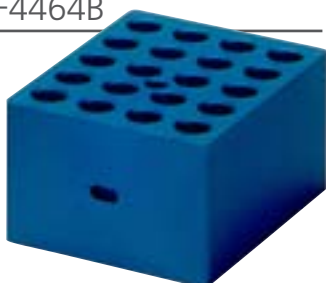
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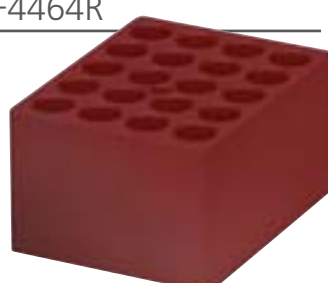
F3509



F4464B



F4464R



6101308



## Ordering Information

Product Code	Tube Diameter	Number of Holes	Thermometer hole	Block Size (d x w x h, mm)
F3501	Plain	None	No	95 x 75 x 50
F3502	6mm	30 (38mm deep, tapered)	Yes	95 x 75 x 50
F3503	10mm	20 (48mm deep, conical)	Yes	95 x 75 x 50
F3504	12mm	20 (48mm deep, conical)	Yes	95 x 75 x 50
F3505	13mm	20 (48mm deep, conical)	Yes	95 x 75 x 50
F3506	15mm	12 (48mm deep, conical)	Yes	95 x 75 x 50
F3507	16mm	12 (48mm deep, conical)	Yes	95 x 75 x 50
F3509	25mm	6 (48mm deep, conical)	Yes	95 x 75 x 50
F4464B	1.5ml tubes (blue)	20 (35mm deep, tapered)	Yes	95 x 75 x 50
F4464R	1.5ml tubes (red)	20 (35mm deep, tapered)	Yes	95 x 75 x 50
6101308	Techne® Dri-Block® Aluminium block extraction tool			

## Techne® Aluminium blocks

For use with Techne® block heaters. Manufactured from anodised aluminium and all with a separate hole to accommodate a thermometer if desired. All blocks can be used in any combination.

F4460



F4461



F4462



F4463



F4464



F4465



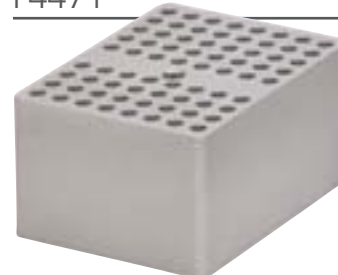
F4466



F4470



F4471



## Ordering Information

Product Code	Tube Diameter	Number of Holes	Thermometer hole	Block Size (d x w x h, mm)
F4460	Plain	None	Yes	95 x 75 x 50
F4461	7mm and 9mm	20 and 10 (38mm deep, conical)	No	95 x 75 x 50
F4462	24mm	6 (48mm deep, conical)	Yes	95 x 75 x 50
F4463	26mm	6 (48mm deep, conical)	Yes	95 x 75 x 50
F4464	1.5ml tubes	20 (35mm deep, tapered)	Yes	95 x 75 x 50
F4465	0.5ml tubes	30 (27mm deep, tapered)	Yes	95 x 75 x 50
F4466	Plastic spacer (2 pack)	None	No	95 x 37 x 50
F4470	2.0ml tubes	20 (35mm deep, conical)	Yes	95 x 75 x 50
F4471	0.2ml tubes	72 (13.8mm deep, tapered)	Yes	95 x 75 x 50
F4476	Gelation Timer block	1 sample cup, flat	Yes	95 x 75 x 50
F4477	384-well PCR plate	384 (7mm deep, tapered)	Yes	95 x 150 x 61
F4501	12mm	20 (24mm deep, conical)	Yes	95 x 75 x 50
F4567	12mm	20 (24mm deep, flat)	Yes	95 x 75 x 50
F4568	15mm	12 (30mm deep, flat)	Yes	95 x 75 x 50
F4569	12mm	20 (20mm deep, flat)	Yes	95 x 75 x 50
F4675	16mm	12 (25mm deep, flat)	Yes	95 x 75 x 50
F4676	13mm	20 (35mm deep, flat)	Yes	95 x 75 x 50



## Bespoke Aluminium blocks

In some cases it is possible to manufacture a bespoke aluminium block. If this service is required, please contact Techne for more details.

F4476



F4477



F4501



F4567



F4568



F4569



F4675



F4676



## Also available (not pictured)

Product Code	Tube Diameter	Number of Holes	Thermometer hole	Block Size (d x w x h, mm)
F3508	19mm	8 (48mm deep, conical)	Yes	95 x 75 x 50
F3510	10mm cuvettes	2 channels 13mm (w) x 38mm (d)	Yes	95 x 75 x 50
F3512	Plain (triple width)	None	Yes	95 x 225 x 50
F4467	96-well HIGH-TEMP	96	Yes	95 x 150 x 61
F4468	96-well culture plate	96 (round wells)	Yes	95 x 150 x 61
F4469	96-well culture plate	96 (flat wells)	Yes	95 x 150 x 61
F4473	96-well PCR plate	96 (17.3mm deep, tapered)	Yes	95 x 150 x 61
F4474	1.0ml Porvair Plate	96	No	95 x 150 x 48
F4480	50ml tubes	5 (48mm deep, conical)	Yes	95 x 75 x 50
F4481	96-well Flat-bottom plate	Flat perimeter ridge	Yes	95 x 150 x 61
F4485	30mm	5 (48mm deep, conical)	Yes	95 x 75 x 50
F4487	43mm	2 (45mm deep, flat)	Yes	95 x 75 x 50
F4490	20mm	8 (48mm deep, conical)	Yes	95 x 75 x 50
F4515	20mm	18 (35mm deep, flat)	2	95 x 225 x 50
F4516	23mm	18 (35mm deep, flat)	2	95 x 225 x 50
6101308	Techne® Dri-Block® Aluminium block extraction tool			

# Techne® Analogue Dri-Blocks®

## DB-2A

- Small, light and compact footprint, economical price
- Can hold up to 2 aluminium insert blocks or one 96-well plate block
- Temperature setting is by a calibrated dial
- Temperature range from ambient to 100°C
- Fast heat-up rate: 30°C to 100°C in just 12 minutes
- Temperature stability at 40°C:  $\pm 0.05^\circ\text{C}$

## DB-3A

- Temperature range from ambient to 200°C for higher temperature applications
- Can hold up to 3 aluminium insert blocks or one 96-well plate block
- Analogue: temperature setting is by a calibrated dial
- Powerful heater for fast heat-up rate: 30°C to 200°C in just 30 minutes
- Temperature stability at 40°C:  $\pm 0.1^\circ\text{C}$

## DB-3

- The DB-3 is designed to hold up to 3 aluminium insert blocks or one 96-well plate block
- Temperature setting is by a calibrated dial
- Temperature range from ambient to 100°C
- Fast heat-up rate: 30°C to 100°C in just 18 minutes
- Temperature stability at 40°C:  $\pm 0.05^\circ\text{C}$



## Specifications

Parameter	DB-2A	DB-3	DB-3A
Temperature range	Ambient +5°C to 100°C	Ambient +5°C to 100°C	Ambient +5°C to 200°C
Number of insert blocks	2	3	3
Temperature stability @ 40°C	$\pm 0.05^\circ\text{C}$	$\pm 0.05^\circ\text{C}$	$\pm 0.1^\circ\text{C}$
Temperature stability @ 100°C	$\pm 0.1^\circ\text{C}$	$\pm 0.1^\circ\text{C}$	$\pm 0.15^\circ\text{C}$
Temperature setting	Rotary dial	Rotary dial	Rotary dial
Temperature scale graduation	2°C	2°C	2°C
Temperature display	n/a	n/a	n/a
Maximum variation between identical blocks @ 40°C	0.2°C	0.2°C	0.2°C
Set point accuracy	$\pm 2^\circ\text{C}$	$\pm 2^\circ\text{C}$	$\pm 2^\circ\text{C}$
Heat up time: 30 to 37°C	8	8	8
Heat up time: 30 to 56°C	9	12	12
Heat up time: 30 to Maximum	12	18	30
Heater power	300W	450W	450W
Power supply	230V or 115V 50-60 Hz	230V or 115V 50-60Hz	230V or 115V 50-60Hz
Dimensions (W x D x H), mm	202 x 260 x 105	279 x 260 x 105	279 x 260 x 105
Shipping Weight	4kg	6kg	6kg

## Ordering Information

Part number	Model number	Description
FDB02AD	DB-2A	Techne® analogue Dri-Block® heater. Ambient + 5°C to 100°C, 2 blocks (230V)
FDB02AP	DB-2A	Techne® analogue Dri-Block® heater. Ambient + 5°C to 100°C, 2 blocks (115V)
FDB03OD	DB-3	Techne® analogue Dri-Block® heater. Ambient + 5°C to 100°C, 3 blocks (230V)
FDB03OP	DB-3	Techne® analogue Dri-Block® heater. Ambient + 5°C to 100°C, 3 blocks (115V)
FDB03AD	DB-3A	Techne® analogue Dri-Block® heater. Ambient + 5°C to 200°C, 3 blocks (230V)
FDB03AP	DB-3A	Techne® analogue Dri-Block® heater. Ambient + 5°C to 200°C, 3 blocks (115V)

# Techne® Sample Concentrator

A sample concentrator is a fast and convenient way of concentrating multiple samples in a block heater at once. Utilising a simple gas delivery system the sample concentrator passes an inert gas over the surface of your samples via stainless steel needles. This in combination with the heat from a 3-block Techne® Dri-Block® heater (ordered separately) produces ideal conditions for fast efficient evaporation.

## Compact

The unit is light and compact enough for convenient use in a fume cupboard when toxic solvents are being evaporated.

## Needles

The needles are made from high quality stainless steel and are specially designed for use with the Techne® Sample Concentrator. When corrosive solutions are being used, PTFE coated needles are available.

## Fully adjustable

The gas delivery needles are inserted into a silicon membrane in virtually any configuration. The Sample Concentrator's gas reservoir is mounted on a fully adjustable stand for accurate height control.



## Specifications

Maximum gas pressure	Must not exceed 2 psi
Maximum vertical travel	320mm
Maximum gas usage	15 litres / minute
Gas	Any inert gas (often Nitrogen)
Gas intake nozzle diameter	6.35mm (1/4")
Needle position	Variable to suit Dri-Block® units
Dimensions (W x D x H), mm	240 x 295 x 530
Shipping weight, kg (gas chamber and stand)	5

## Ordering Information

Product code	Description
FSC400D	Sample Concentrator gas reservoir and stand only (for use with test tubes)
FSC496D	Sample Concentrator gas reservoir and stand only (for use with 96-well plates)
6101604	Replacement gas chamber sealing pad

Note: Needles are not included with the Sample Concentrator and must be purchased separately

Product code	Description
F7209	Pack of 100 needles, 76mm long
F7210	Pack of 100 needles, 127mm long
FSC4NCS	Pack of 100 PTFE coated needles, 76mm long
FSC4NCL	Pack of 100 PTFE coated needles, 127mm long



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Dri-b