

Sample concentrator / Techne (Cambridge) Limited.

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SAMPLE CONCENTRATOR

- Rapid concentration of samples
- Concentrates up to 90 samples simultaneously
- Fully adjustable gas reservoir
- Easy to operate
- Suitable for use with most gases
- Versatile: unit fits neatly over the DB-3 series of Dri-Block® heaters
- Temperature range 25°C to 200°C

Techne
C A M B R I D G E



The Techne Sample Concentrator accelerates the concentration of large numbers of samples in a matter of minutes whereas traditional techniques may take several hours. This makes the unit a particularly useful tool in the preparation of samples for analytical techniques including drug screening, hormone assay, chromatographic analysis and scintillation counting.

The Sample Concentrator consists of a fully adjustable gas reservoir which mounts over a precision controlled DB-3 series Dri-Block® heater with a temperature range of 25°C-200°C enabling samples to be heated quickly and efficiently to the required temperature to assist evaporation.

When it is not being used for sample concentration the gas chamber may be removed and the Dri-Block® used for routine incubation and temperature control of samples for a wide range of laboratory applications.

Sample Concentration

As the samples are being heated gas is passed via the unique patented gas chamber through hypodermic needles on to the surface of the test solution, so providing the environment for rapid evaporation and sample concentration. The hypodermic needles are set in a silicone rubber matrix assembly enabling their positions to be changed to accommodate different tube configurations.

The standard 76mm long needles are suitable for most applications but, where large samples require evaporation in long tubes, packs of longer needles (127mm) are available.

The gas chamber is suitable for use with most gases and may be adjusted to suit the level of liquid in the sample tubes to give even faster evaporation times.

The compact nature of the Sample Concentrator enables it to be placed in a fume cupboard when toxic vapours are being evaporated.

Dri-Block® Heater

The Dri-Block® heater includes a recessed chamber for interchangeable insert blocks (three per unit) which are supplied to match standard laboratory tubes or containers ranging from 6mm to 26mm diameter.

The Dri-Block® heater design, temperature sensor and solid state circuitry give exceptionally good temperature control and uniformity. Temperature setting on the DB-3 and DB-3A is by a dial calibrated in degrees centigrade (with the DB-3D the temperature is set using the knob and set button and is displayed on the LED panel), heat up is rapid. Independent pilot lights to indicate mains power and heater action are incorporated and an on/off switch is mounted on the rear panel. The unit is strongly constructed, light in weight and has extremely efficient insulation to ensure that the case remains cool enough to handle even at maximum operating temperatures.

SPECIFICATIONS

	Sample Concentrator	DB-3	DB-3A	DB-3D
Temperature range °C		25 -100	25 -200	25 -200
Temperature stability @ 40°C @ 100°C		±0.1°C ±0.25°C	±0.1°C ±0.25°C	±0.1°C ±0.25°C
Temperature Setting		Rotary Knob	Rotary Knob	Rotary Knob and Button
Temperature Display		-	-	Red LED 3 digit
Temperature Scale Graduation		2°C	5°C	-
Maximum temperature variation between identical blocks @ 40°C		0.2°C	0.2°C	0.2°C
Set Point accuracy		±2°C	±2°C	±2°C
Maximum number of blocks		3	3	3
Heat up time, minutes 30-37°C 30-56°C Min.-Max.		8 12 20	8 12 30	11 15 25
Overall size mm, L×W×H	295×240× 530	279×260×105	279×260×105	279×260×105
Gas Supply - Not to exceed	2 psi			

Aluminium Insert Blocks

Insert blocks are not included with the Sample Concentrator and must be ordered separately. Each of the Dri-Block® heaters will take three insert blocks.

Needles

Needles are not included with the Sample Concentrator and must be ordered separately. They are available in packs of 90, 76mm or 127mm long.

INSERT BLOCKS

Part Number	Tube Size (diam)	Number of Holes	Size
F3501	Plain block	None	95×76×51
F3502	6mm	30	95×76×51
F3503	10mm	20	95×76×51
F3504	12mm	20	95×76×51
F3505	13mm	20	95×76×51
F3506	15mm	12	95×76×51
F3507	16mm	12	95×76×51
F3508	19mm	8	95×76×51
F3509	25mm	6	95×76×51
F3510	10mm cuvettes	2 channels	95×76×51
F3512	Plain block	thermometer hole only	95×225×51
F4460	Plain block	thermometer hole only	95×76×51
F4461	9mm	10	95×76×51
	7mm	20	95×76×51
F4462	24mm	6	95×76×51
F4463	26mm	6	95×76×51
F4464	1.5ml microcentrifuge tubes	20	95×76×51
F4465	0.5ml microcentrifuge tubes	30	95×76×51

ORDERING INFORMATION

Model	Part	Voltage	Watts
Sample Concentrator gas chamber and stand only FSC400D			
<i>One of the following Dri-Block® heaters is required with the above</i>			
DB-3	FDB030D	220/240V 50/60 Hz	650
DB-3	FDB030P	110/120V 50/60 Hz	650
DB-3A	FDB03AD	220/240V 50/60 Hz	650
DB-3A	FDB03AP	110/120V 50/60 Hz	650
DB-3D	FDB03DD	220/240V 50/60 Hz	650
DB-3D	FDB03DP	110/120V 50/60 Hz	650
Needles for Sample Concentrator			
<i>Needles are not included with the Sample Concentrator and must be ordered separately.</i>			
76mm	F7209	Pack of 90 needles	
127mm	F7210	Pack of 90 needles	
76mm	FSC4NCS	Pack of 90 PTFE coated needles	
127mm	FSC4NCL	Pack of 90 PTFE coated needles	



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