RATEK

fisher biotec australia

MORE THAN 20 YEARS IN BUSINESS Established 1997

Australian distributors:
Fisher Biotec Australia
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web: www.fisherbiotec.com

DBHxOOOD SERIES

RATEK DIGITAL DRY BLOCK HEATERS

- Ambient +5°C to 200.0°C Temperature Range
- Bright Dual-Line Digital LED Display
- Precision 0.1°C Digital Operation
- Simple to Operate
- Available in 1, 2, & 4 Block Sizes

Energy Efficient Design
- Pocketed elements for efficient heat transfer
- High grade insulation retains heat, using less power

Smart Safety Features
- User configurable process over-temperature audible & visual alarm
- Independent element safety cutout prevents element thermal runaway
- Fail-safe over-current protection

- Excellent Temperature Stability
- 1 Element Per Block For Rapid Heating & Uniformity
- Wide Range of Blocks & Evaporation Systems Available

Extremely Versatile

Ratek precision digital block heaters offer excellent temperature stability combined with a large active LED display for easy visibility from across the lab. Available in 3 sizes accommodating 1, 2 or 4 standard blocks, the DBHxOOOD range is the latest in Ratek's long established history of quality Australian made block heaters.

All models feature precision digital PID control with bright dual line LED display which indicates set and current temperatures, combined with simple up and down temperature control buttons.

Independent concealed heaters heat each block individually to achieve rapid heat-up times and excellent spacial uniformity.

A user-configurable process over-temp audible and visual alarm also provides the user with peace of mind. Perhaps the best new feature in the range is the capability to operate at up to 200° C as standard, allowing for a much wider range of digestion applications to be performed in addition to low temperature molecular and biological work.

Ratek's most advanced block heaters to date offer simplicity with accuracy and can be run day in day out for any number of general lab applications.

Simple operation with large bright dual-line display and informative LEDs

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DBHxOOOD SERIES

MODEL COMPARISON

	DBH1000D	DBH2000D	DBH4000D
Block positions	1 x SB/EB/FB/VB block	2 x SB/EB/FB/VB blocks OR 1 x MBx 96 well plate block	4 x SB/EB/FB/VB blocks OR 1 x MBx 96 well plate block + 2 x SB/EB/FB/VB blocks OR 2 x MBx 96 well plate blocks
Control type	Advanced Digital PID		
Temperature control range °C	Ambient +5°C to 200°C, indicated in 0.1°C increments		
Control stability	+/- 0.2°C		
Safety features	• User configurable over-temperature process alarm • Independent manual reset element over-temperature safety cutout (internal) • Over-current fail-safe fuse		
Power input	240V AC/170W	240V AC/335W	240V AC/665W
Overall dimensions (mm)	W130 x D315 x H125	W205 x D315 x H125	W353 x D315 x H125
Nett weight	3.2 kg (without block)	4.4 kg (without block)	5.7 kg (without block)

SB/EB/FB/VB BLOCKS

Drop-in Dry Block Heater Blocks - Tubes & Vials

A Block For Every Application

A wide range of standard dry block inserts are available to suit Ratek block heaters as well as many other brands. All blocks are precision machined made from black anodised aluminium which is resistant to corrosion, spills and staining.

The smooth anodised surface ensures excellent heat transfer to all containers, and when used in Ratek heaters gives excellent temperature uniformity throughout the block.

L95 x W75 x H50mm, black anodised aluminium

MB1/2/3/4 BLOCKS

Drop-in Dry Block Heater Blocks - 96 Well Plates

A Perfect Fit

A range of blocks to suit 96 well plates is available, with 4 hole profiles accommodated. Each block occupies 2 standard block positions, so can be used in 2 block heaters or above, and in conjunction with other single position blocks. A thermometer reference hole is provided in addition to the plate locating holes.

Nitrogen blow-down systems are available to suit all Ratek blocks, including the MB range.

L150 x W95 x H50mm, black anodised aluminium

POPULAR DRY BLOCK SIZES

Block Series	Number of Holes	Hole Size/Type	Codes
10.5 mm through to 14 mm diameter holes	20	Code is diameter, 45mm deep	SB10.5, SB12, SB13, SB14
15 mm through to 17 mm diameter holes	12	Code is diameter, 45mm deep	SB15, SB16, SB17
Block to suit 1.5mL Eppendorf centrifuge tubes	20	Matched to tube profile	EB20
Block to suit 2 mL Eppendorf centrifuge tubes	20	Matched to tube profile	SB2.0
Block to suit 15mL Falcon tubes	12	Matched to tube profile, 45mm deep	FB15
Block to suit 50mL Falcon tubes	4	Matched to tube profile, 45mm deep	FB50
Block to suit 2 mL vials	20	12.3 mm dia, 24 mm deep, flat bottom	VB20
96 well plates (occupies 2 standard block positions)	96	Flat (MB1), Conical (MB2), Round (MB3)	MB1, MB2, MB3
* Allow a minimum of 0.3 mm on top of your tube diameter for the hole size		**A complete listing of standard blocks is available on our web site**	

CUSTOM BLOCKS

Dry Block Heater Blocks - Made to Order

Match The Block to Your Container

For optimum heat transfer in virtually any container, Ratek can manufacture blocks to exact specifications in almost any size. Our computerised machining centre delivers a precise fit in a wide range of available material sizes and finishes. Custom blocks can be quoted quickly once your requirements have been determined. Contact us today to discuss a custom machined block to suit your application, or send a sample container for us to measure up accurately for you.

EVAPORATION

Intelligent Design Allows Gas Manifolds To Be Used With or Without a Block Heater

Evaporation manifolds available for all block heater models

Sample Concentration/Nitrogen Blow-Down Systems

Evaporation systems are available for all Ratek block heaters to allow a controlled gas flow into tubes and vials to accelerate evaporation. Gas manifolds with stainless steel removable needles to suit all standard size blocks are available, with blanking needles available for use when not all outlets are required. The EM96 fixed needle manifold is also available to suit 96 well plates when used with an MBx plate block.

Need Help Selecting a Model ?

For assistance in selecting the right block heater and manifold combination, please don't hesitate to contact Ratek.

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EVAPORATION MANIFOLDS

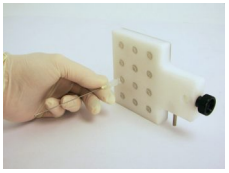
Manifolds To Suit All Standard Blocks

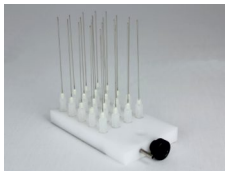
Ratek evaporation manifolds (EM4/6/9/12/20/96) are mounted to retort posts on a removable stand and gas tap assembly (EMS1000/2000/4000). The manifold position can be adjusted for height and clearance or easily changed to suit a different block configuration.

Individual manifolds or the entire evaporation system can be easily removed when not required simply by lifting the block heater away from the rear stand. This intelligent design allows the evaporation system to be used independently of the block heater when temperature control is not required. Individual valves are provided on the rear of the evaporation stand allowing independent control of gas flow to each manifold.

EVAPORATION ORDER CODES

Heater Model	# of Manifold Positions	Matching Stand and Gas Tap Model #	Capacity
DBH1000D	1	EMS1000	Single block manifolds only
DBH2000D	2	EMS2000	2 x single block manifolds or 1 x 96 well manifold
DBH4000D	4	EMS4000	4 x single block manifolds or 1 x 96 well manifold + 2 x single block manifolds or 2 x 96 well manifolds
Manifold Model (All manifolds supplied with a full set of needles. EM96 has fixed non-replaceable needles)	**# Of Needle Outlets**		**Applicable Standard Block Models**
EM4	12		FB50
EM6	4		-
EM9	20		-
EM12	96		SB15, SB16, SB17, FB15
EM20	12		SB10.5, SB12, SB13, SB14, EB20, SB2.0, VB20
EM96 (*EMS2000 or EMS4000 required)	4		MB1, MB2, MB3, MB4
Spare Needles	**Length**	**Description**	**Applicable manifold models**
EMSN1	85mm	Stainless steel	EM4, EM6, EM9, EM12, EM20
EMSN2	N/A	Blanking needle	EM4, EM6, EM9, EM12, EM20





AUSTRALIAN MADE & SUPPORTED

3 YEAR PARTS WARRANTY

Certified System
Quality
ISO 9001
SAI GLOBAL