

Dry block heaters » QB series

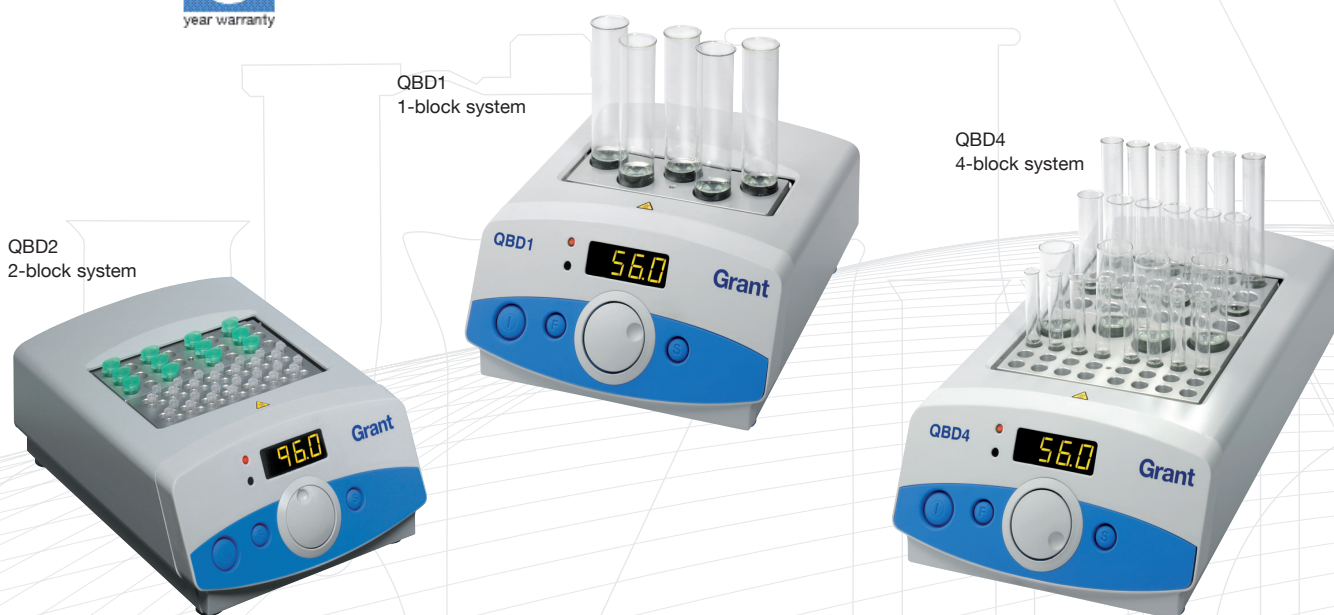
# QB Dry block heating systems

for test tubes, microtubes and microplates ambient +5°C to 200°C

Dry block heating systems combining superb temperature control and uniformity with high quality design and great versatility. A premium product range at an affordable price.

- **Accurate, reproducible, rapid and safe heating of your samples** – due to advanced temperature control combined with high quality, precision-engineered blocks providing excellent thermal contact
- **Versatile range of interchangeable heating blocks to fit any sample tube or plate** – from our standard range of blocks, or custom-made blocks to suit your application
- **Full range of models and options for basic through to more sophisticated applications**

**3**  
year warranty



#### Applications:

- General use - incubating samples at set temperatures, heating block for boiling of solutions in tubes
- Life-science – cell digestion, DNA/RNA extraction, post sequencing PCR clean-up - dry down step, boiling in vitro DNA/RNA/protein samples, incubating invitro reactions/digestions, extraction of DNA for real-time PCR analysis, denaturing nucleic acid and protein samples
- Industrial - digestion of environmental samples for chemical oxygen demand analysis, soil digests, maintaining temperatures
- Biopharm - conductivity testing
- Clinical - acylcarnitines derivatisation, MRSA and PBP2 latex testing, heating flush/media used in egg recovery, fertility to keep test tubes at correct temperature during egg collection

Dry block heaters » QBD2 mid range/general purpose showcase

## showcase – mid range/general purpose example

Model QBD2\* stability and uniformity  $\pm 0.1^\circ\text{C}$ , range ambient  $+5$  to  $130^\circ\text{C}$

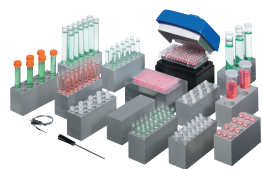
A versatile general purpose system with two removable/interchangeable blocks and a comprehensive specification to suit most dry block heating applications in the laboratory.

- Stability and uniformity  $\pm 0.1^\circ\text{C}$
- Digital temperature control for optimum precision
- Heating range ambient  $+5^\circ\text{C}$  to  $130^\circ\text{C}$ , with rapid heat-up time
- Range of convenient features including alarms, single and dual point calibration, programmed start/stop, 'offset' for known sample temperature variation and choice of external or internal probes
- External probe available for accurate temperature control in a tube

Microplate or microtube blocks for 0.2 ml tubes, strips and 96-well microplates used in molecular biology and biotechnology applications



Wide range of interchangeable blocks (order blocks separately) – extraction tool supplied as standard for easy and safe removal of blocks.



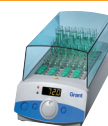
Custom blocks – for virtually any tube or vessel

High power heater for fast heat-up – from  $25^\circ\text{C}$  to  $100^\circ\text{C}$  in only 15 minutes

Over temperature cut-out protects your samples and your workplace



Optional safety cover – protects samples from contamination and users from accidental contact with hot blocks



Convenient timer facility, with audible buzzer, for reaction timing and function timing, e.g. delayed heater switch-on/turn-off

Simple to use rotary dial plus two keys for fast, accurate set-up


Compact footprint and sloping fascia optimise benchspace and ensure clear visibility during set-up and in use

High quality, robust construction in streamlined coolwall aluminium and chemical-resistant plastic – durable in demanding environments

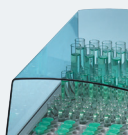
\* see summary table on pp. 8.3-8.4 for accessories and for other models in the range

## Dry block heaters» QB series » Models and specifications

### Dry block heating systems with interchangeable blocks – models

Temperature range <span style="display: inline-block; width: 10px; height: 10px; background-color: #f9e79f; border: 1px solid #ccc; margin-right: 5px;"></span> ambient + 5 to 130°C <span style="display: inline-block; width: 10px; height: 10px; background-color: #f4b084; border: 1px solid #ccc; margin-right: 5px;"></span> ambient + 5 to 200°C <span style="display: inline-block; width: 10px; height: 10px; background-color: #f08080; border: 1px solid #ccc; margin-right: 5px;"></span> ambient + 5 to 100°C	Precision digital			High performance digital	Economy analogue	
	QBD1	QBD2	QBD4	QBH2	QBA1	QBA2
	1-block system	2-block system	4-block system	2-block system	1-block system	2-block system
● = standard  						
	2 kg h: 100 mm d: 230 mm w: 200 mm	2.5 kg h: 100 mm d: 280 mm w: 200 mm	4 kg h: 100 mm d: 380 mm w: 200 mm	2.5 kg h: 100 mm d: 280 mm w: 200 mm	2 kg h: 100 mm d: 230 mm w: 200 mm	3 kg h: 100 mm d: 280 mm w: 200 mm
Temperature range °C	ambient + 5 to 130			ambient + 5 to 200	ambient + 5 to 100	
Temperature setting range °C	15 to 130			15 to 200	0 to 100	
Setting resolution °C	0.1			0.1	2	
Stability @ 37°C, °C	± 0.1			± 0.1	± 1.0	
Uniformity within the block @ 37°C, °C	± 0.1			± 0.1	± 1.0	
across similar blocks @ 37°C, °C	± 0.2			± 0.2	± 1.0	
Temperature display, LED	●			●	–	
Display resolution °C	0.1			0.1	–	
Heat up time 25° to 100°C mins	15			15	25	
Three programmable temperature/time segments plus end-of-program segments	–			●	–	
Reaction timer, with audible buzzer	1 to 999 mins			1 to 999 mins	–	
Function timer for delay of heater start-up/switch-off	up to 72 hours			up to 72 hours	–	
Off-set adjustment	●			●	–	
Two-point calibration of internal and external probes	●			●	–	
High/low temperature alarms, settable to within 0.5°C of set temperature	●			●	–	
Fault indication display	●			●	–	
Power W	150	300	600	300	150	300
Supply voltage V	120 or 230			120 or 230	120 or 230	
Safety over temperature cut-out	thermal fuse			thermal fuse	thermal fuse	
Extraction tool for easy and safe block removal	●			●	●	

## Dry block heaters » QB series » Options and accessories

Options and accessories		QBD1	QBD2	QBD4	QBH2	QBA1	QBA2
x = not available    ● = available							
<b>Interchangeable blocks*</b>							
No. of blocks	140 x 50 x 63 mm	1	2	4	2	1	2
QB-0	Plain block without holes	●	●	●	●	●	●
QB-10	for 24 x ø 10mm test tubes, 50 mm hole depth	●	●	●	●	●	●
QB-12	for 24 x ø 12 mm test tubes, 50mm hole depth	●	●	●	●	●	●
QB-13	for 12 x ø 13 mm test tubes, 50 mm hole depth	●	●	●	●	●	●
QB-16	for 12 x ø 16 mm test tubes, 50 mm hole depth	●	●	●	●	●	●
QB-17H	for 10 x Falcon tubes tall 17mm ø test tubes, 75mm hole depth	●	●	●	●	●	●
QB-18	for 12 x ø 18 mm test tubes, 50 mm hole depth	●	●	●	●	●	●
QB-24	for 5 x ø 24 mm test tubes and universal bottles, 50 mm hole depth	●	●	●	●	●	●
QB-50	for 4 x ø 50 ml centrifuge test tubes, glass universals, 50 mm hole depth	●	●	●	●	●	●
QB-H	for 56 x ø 0.2 ml microtube, 14 mm hole depth	●	●	●	●	●	●
QB-E0	for 24 x ø 0.5 ml microtube, 30 mm hole depth	●	●	●	●	●	●
QB-E1	for 24 x ø 1.5 ml microtube, 35 mm hole depth	●	●	●	●	●	●
QB-E2	for 24 x ø 2.0 ml microtube, 35 mm hole depth	●	●	●	●	●	●
QB-E5	for 12 x 5.0 ml microtube, 53.5 mm hole depth	●	●	●	●	●	●
QB-DN	Dolphin nose tube 24 x ø 11.13mm to ø 6.1mm	●	●	●	●	●	●
<b>External Pt1000 temperature probe</b>							
 QBEP	Standard probe. For in-sample or in-block temperature control; encased in stainless steel sheath, ø 3 mm x 30 mm long, with 350 mm of cable	●	●	●	●	x	x
 QBEP-WM	Short-form probe. For in-sample or in-block temperature control; encased in stainless steel sheath, ø 3 mm x 14 mm long, with 350 mm of cable	●	●	●	●	x	x
<b>Microplate blocks for molecular biology and biotechnology applications</b>							
Double-size blocks 140 x 100 x 75 mm supplied with additional extraction tool							
 QDP-H	96 holes in microplate configuration for 0.2 ml microplates, strips or individual tubes  Uniformity ± 0.3°C within tubes across the block; 6.2 mm ø holes, 14 mm hole depth	x	●	x	●	x	●
 QDP-FL	Universal block for standard 96-well plates (u-well, v-well, flat bottom, high temperature)  Uniformity ± 0.5°C between wells; supplied with hinged, double layer lid to create an insulated incubation chamber	x	●	x	●	x	●
<b>Safety covers (not required with QDP-FL Microtiter blocks)</b>							
	Made from tough clear acrylic for maximum visibility whilst preventing accidental touching of a hot block or contamination of samples from splashes  Clearance height 85 mm	QBL1	QBL2	QBL4	QBL2	QBL1	QBL2

\* Custom blocks available - please enquire

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