

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**



QBD2  
2 block system



QBD1  
1 block system



QBD4  
4 block system



## 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

## 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.

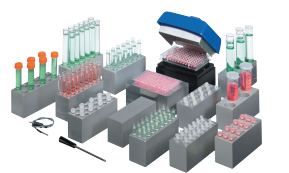
- Stability and uniformity  $\pm 0.1^\circ\text{C}$
- Digital temperature control for optimum precision
- Heating range ambient  $+5^\circ\text{C}$  to  $130^\circ\text{C}$ , with rapid heat-up time
- Range of convenient features including alarms, single and dual point calibration, programmed start/stop, '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 20 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 page 7.3-7.4 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  ambient + 5 to 130°C  ambient + 5 to 200°C  ambient + 5 to 100°C  ● = standard	Precision digital			High performance digital
	QBD1	QBD2	QBD4	QBH2
	1 block system	2 block system	4 block system	2 block system
				
	h: 100mm d: 230mm w: 200mm weight: 2kg	h: 100mm d: 280mm w: 200mm weight: 2.5kg	h: 100mm d: 380mm w: 200mm weight: 4kg	h: 100mm d: 280mm w: 200mm weight: 2.5kg
Temperature range	°C ambient +5 to 130			°C ambient +5 to 200
Temperature setting range	°C 15 to 130			°C 15 to 200
Setting resolution	°C 0.1			°C 0.1
Stability	@ 37°C, ± °C 0.1			@ 37°C, ± °C 0.1
Uniformity	within the block @ 37°C, ± °C 0.1			within the block @ 37°C, ± °C 0.1
	across similar blocks @ 37°C, ± °C 0.2			across similar blocks @ 37°C, ± °C 0.2
Temperature display, LED	●			●
Display resolution	°C 0.1			°C 0.1
Heat up time 25° to 100°C	mins 20			mins 15
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	W 300	W 600	W 300
Supply voltage	V 120 or 230			V 120 or 230
Safety	over temperature cut-out thermal fuse			over temperature cut-out 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
- = not available • = available					
<b>Interchangeable blocks*</b>					
No. of blocks	140 x 50 x 63mm	1	2	4	2
QB-0 	Plain block without holes	•	•	•	•
QB-10 	for 24 x ø 10mm test tubes, 50mm hole depth	•	•	•	•
QB-12 	for 24 x ø 12mm test tubes, 50mm hole depth	•	•	•	•
QB-13 	for 12 x ø 13mm test tubes, 50mm hole depth	•	•	•	•
QB-16 	for 12 x ø 16mm test tubes, 50mm hole depth	•	•	•	•
QB-17H 	for 10 x Falcon tubes tall 17mm ø test tubes, 75mm hole depth	•	•	•	•
QB-18 	for 12 x ø 18mm test tubes, 50mm hole depth	•	•	•	•
QB-24 	for 5 x ø 24mm test tubes and universal bottles, 50mm hole depth	•	•	•	•
QB-50 	for 4 x 50ml centrifuge test tubes, glass universals, 50mm hole depth ø 29mm	•	•	•	•
QB-H 	for 56 x 0.2ml microtube, 14mm hole depth, ø 6.5mm	•	•	•	•
QB-E0 	for 24 x 0.5ml microtube, 30mm hole depth, ø 8mm	•	•	•	•
QB-E1 	for 24 x 1.5ml microtube, 35mm hole depth, ø 10.8mm	•	•	•	•
QB-E2 	for 24 x 2.0ml microtube, 35mm hole depth, ø 11mm	•	•	•	•
QB-E5 	for 12 x 5.0ml microtube, 53.5mm hole depth, ø 16.7mm	•	•	•	•
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	•	•	•	•
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	•	•	•	•
<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	-	•	-	•
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	-	•	-	•
<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

\* Custom blocks available - please enquire



# WolfLabs

**Pricing on any accessories shown can be found by keying the part number into the search box on our website.**

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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