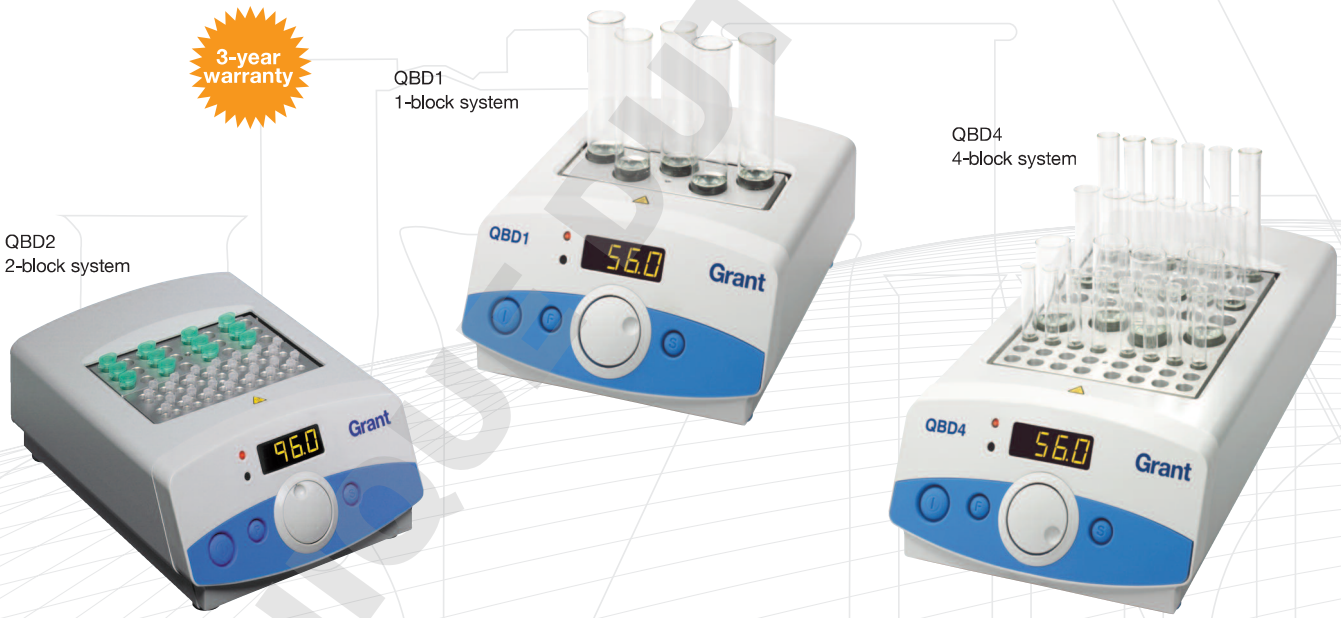
QB Dry block heating systems

for test tubes, microtubes and microplates range ambient + 5 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**



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 invitro 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

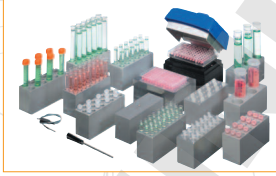
Model QBD2* stability and uniformity ± 0.1°C, range ambient + 5 to 130°C

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 ± 0.1°C**
- **Digital temperature control for optimum precision**
- **Heating range ambient + 5°C to 130°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 microtitre plates 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°C to 100°C in only 15 minutes

Overtemperature 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 rotor plus two keys provide access to the interactive interface 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 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	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
						
	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	6 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 overtemperature cut-out	thermal fuse			thermal fuse; adjustable	thermal fuse	
Extraction tool for easy and safe block removal	●			●	●	
Weight kg	2	2.5	4	2.5	2	3

Dry block heating systems » QB series » options and accessories

Options and accessories

x = not available ● = available

	QBD1	QBD2	QBD4	QBH2	QBA1	QBA2
Interchangeable blocks						
No. of blocks 140 x 50 x 63 mm	1	2	4	2	1	2
QB-0 Plain block without holes	●	●	●	●	●	●
QB-10 24 x 10 mm Ø holes, 50 mm hole depth	●	●	●	●	●	●
QB-12 24 x 12 mm Ø holes, 50mm hole depth	●	●	●	●	●	●
QB-13 12 x 13 mm Ø holes, 50 mm hole depth	●	●	●	●	●	●
QB-16 12 x 16 mm Ø holes, 50 mm hole depth	●	●	●	●	●	●
QB-17H for 10 x Falcon tubes tall 17mm diam, 75mm deep	●	●	●	●	●	●
QB-18 12 x 18 mm Ø holes, 50 mm hole depth	●	●	●	●	●	●
QB-24 5 x 24 mm Ø holes and universal bottles, 50 mm hole depth	●	●	●	●	●	●
QB-50 4 x 50 ml centrifuge tubes, glass universals, 50 mm hole depth	●	●	●	●	●	●
QB-H 56 x 0.2 ml microtube, 14 mm hole depth	●	●	●	●	●	●
QB-E0 24 x 0.5 ml microtube, 30 mm hole depth	●	●	●	●	●	●
QB-E1 24 x 1.5 ml microtube, 35 mm hole depth	●	●	●	●	●	●
QB-E2 24 x 2.0 ml microtube, 35 mm hole depth	●	●	●	●	●	●
QB-DN Dolphin nose tube 24 x Ø 11.13mm to Ø 6.1mm	●	●	●	●	●	●
External Pt1000 temperature probe						
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
Microplate blocks for molecular biology and biotechnology applications 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	●
Safety covers (not required with QDP-FL Microtiter blocks)						
 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