



Auto-Q Modular Thermal Cycler

Auto-Q is a premium performance modular Thermal Cycler System consisting of Server and Satellite modules providing a flexible network, expandable in single Thermal Cycler increments and designed to fulfil the needs of the most demanding Life Science laboratories.

An intuitive user interface driven through the Server's 8.5 inch touch screen is used to independently control up to four Thermal Cyclers: a Server and up to three Satellites, through a simple USB network. Alternatively, large volume users will opt for PC control of the Satellite variant where up to 15 satellites can be controlled from a single PC operating each block independently, in subgroups or as a single entity.

The most advanced programming allows users to create protocols employing any combination of temperature, touchdown, hotstart, gradient or store steps in seconds. Users can even choose to use the wizard function where protocols are automatically generated from primer sequence, template type and size of amplicon.

The unique lid mechanism automatically opens and closes the lid and pressurises the sample at user defined steps in the protocol making it the perfect partner for up and downstream processing machinery in the highest throughput laboratories.

Features

- High performance modular thermal cycler
- Up to 4 independent 96/384 well thermal blocks controlled by one Auto-Q Server or 15 from a PC
- Automatic lid open/close and pressurisation
- Intuitive user interface for rapid programming and runs
- Ramp rate up to 3°C^{-1}
- Uniformity better than 0.8°C from 30°C to 99°C
- Interchange thermal blocks in seconds
- Barcode entry for sample tracking and GLP records
- User level management and file protection
- 2 year warranty
- Universal voltage (100V-240V)

Modular Thermal Cycler System

Gene Amplification techniques continue to demand better analysis equipment with lower variability.

Auto-Q is the pinnacle of Quanta Biotech's QB range of high performance Thermal Cyclers.

Powered by *Quad Engine Technology* each block has four totally independent thermal engines ensuring absolute temperature control, excellent uniformity and, when required, near linear gradients for optimisation experiments.

The screenshot displays the software interface for a Quanta Biotech Thermal Cycler. It features a navigation menu on the left with options like 'Open Lid', 'Stop PCR', and 'Program Wizard'. The main area shows a temperature profile graph for 'Satellite 1' with a '3TGPCR' program. The graph plots temperature from 10°C to 110°C over 30 cycles. A sidebar on the right provides detailed system information, including program details, step information (Denaturation at 95.0°C), cycle information (30 cycles), sensor temperatures (all at 94.9°C), lid status (not on), and times (00:00:17 remaining).

System Information
Program standard pcr
Step Information Denaturation 95.0°C 00:00:30
Cycle STANDARD PCR : 30 Cy... 29 Cycles to go
Sensor Temperatures Sensor 1 : 94.9°C Sensor 2 : 95.0°C Sensor 3 : 94.9°C Sensor 4 : 95.0°C Max Overshoot: 0.1°C
Lid Status Target Temp: Lid Not ON Actual Temp: Lid Not ON Pressure: 2 N
Times Step time remaining: 00:00:17 Elapsed Time: 0dy 00:03:50
GLP File Name standard pcr16112004084510...

Features

- Quad Engine Technology in every Thermal Block for superior temperature control
- Up to 30°C gradients for protocol optimisation experiments
- Unique consumable pressure system delivers a user definable force of 5N - 300N to seal all types of consumable from micro centrifuge tube to microplate and eliminate evaporation
- Up to 1000 cycles of ten different cycle sets within a single protocol
- Virtually unlimited protocol storage
- Encrypted GLP record of every run
- Protocol and GLP report download to USB memory stick
- Simple application upgrade by web download and USB stick upload
- Inbuilt lid and thermal engine operational qualification test protocols

Quanta Biotech ThermalCycler

Open Lid

Start PCR

Program Wizard

View & Edit Files

Reports

Settings

CYCLER MONITOR

Server
StatusAuto Q Satellite 1
Status IdleAutoQ Satellite 2
Status IdleAutoQ Satellite 3
Status Idle

Compose a New PCR Program

Program Window

	Close Lid	110.0 °C	Auto Mode	Pressure
	Start Cycle	STANDARD PCR	30 times	
	Denaturation	95.0°C	00:00.30	
	Annealing	55.0°C	00:00.30	
	Elongation	72.0°C	00:00.30	
	End Cycle	STANDARD PCR		

Command List

	Barcode Input
	Automatic Hot Start
	Manual Hot Start
	Open Lid
	Close Lid
	Temperature Step
	Touchdown
	Gradient Step
	Start Cycle
	End Cycle
	Store
	Script Information

The Current Program is valid.

Run Time : 01:11.24

Profile

Save

Save As

Cancel

2:15:49 pm

Actual
19.6°CTarget
--°C

RESERVED FOR : None

Satellites

Up to three Satellites can be connected to each Server to provide a system throughput of over 1000 samples per hour.

Alternatively, up to fifteen Satellites can be controlled directly from a PC using Quanta Biotech's **PCQB** software.

All units function totally independently with full power recovery



Technical Specification and Ordering Information

Auto-Q Software

QBPC Application Software	QBPCQB	Application software for Windows XP. Ability to control up to 15 Satellites Requires: PC compatible computer with Pentium microprocessor, at least 512mb RAM. and high resolution graphics display (at least 1024 x 768 x 24 bits)
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Auto-Q Units (order Thermal Block separately)

Auto-Q Server	QBAQSERV	Thermal Cycler compatible with all thermal blocks with integral touch screen and full operating software sufficient to control itself and a USB network of up to three Satellites
Auto-Q Satellite	QBQASAT	Thermal Cycler compatible with all thermal blocks capable of being controlled from a Server or a PC running Quanta Biotech's PCQB PC Application Software

Auto-Q Thermal Block

Auto-Q 96 x 0.2ml Thermal Block	QBAQTB9602	96 well anodized aluminium gradient block with Quad engine drive Suitable for 96 well microplates or 96 x 0.2ml microfuge tubes
Auto-Q 384 Well Thermal Block	QBAQTB384	384 well anodized aluminium thermal block with Quad engine drive Suitable for 384 well microplates
Auto-Q Combi Thermal Block	QBAQTB0205	96 well anodized aluminium gradient block with Quad engine drive Suitable for 96 x 0.2ml micro centrifuge tubes or 48 x 0.5ml micro centrifuge tubes

Auto-Q Accessories

Auto-Q Memory Stick	QBAQMS64	64mb USB memory stick Suitable for application upgrade, protocol and GLP report transfer to and from Servers
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Quanta Biotech Ltd

Systems for Quantitative Biology

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Brochure issue1.2

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