## GTC96S thermal cycler

The GTC96S advanced thermal cycler delivers exceptional performance at an affordable price. A unique protocol optimisation process utilises Flexible Temperature technology to segregate the 96-well plate into six discrete (4×4-well) temperature zones, made easily distinguishable by blue and black squares.

Temperature selection is no longer automated and is entirely in the hands of the operator over a 24°C range, anywhere between 4 and 96°C. This enables the operator to optimise PCR by testing 6 different temperatures simultaneously in just one thermal cycler run. With heating and cooling rates of 5°C/s and 3.5°C/s respectively, the precision temperature control of the GTC96S minimises temperature overshooting and undershooting between individual stages within each PCR cycle, resulting in faster run times and greater efficiency.

Programming is both quick and simple through a large user-friendly interface, while pre-programmed methods make set-up obvious even to first time users. A heated lid, which is fully adjustable to apply optimal pressure to 0.2ml tubes and microplates, may be programmed to hold different temperatures between 60 to 65°C or 100 to 115°C.







## Simplified Workflow – Improved Throughput GTC96 may be programmed to operate between one and six different annealing temperatures of user

- choice, across the block.

  Improved Throughput by reducing time
- Simplified Workflow by reducing steps

Figure 1. Primers designed to anneal to various genes (e.g. Gene A. B., and C) typicall have different annealing temperatures ( $\Gamma_i$ , $\Gamma_2$  and  $\Gamma_3$ ). To simplify workflow and increase throughput the GTC96 can perform up to six different reactions, significantly reducing steps and time.

## Intuitive User Interface

GTC96 utilises an intuitive user interface. This user interface is friendly to the laboratory environment. It can be used with lab gloves even if wet. The ramping speed and eliminated overshooting and undershooting which contributes to longer run times, have been improved.



## KEY FEATURES

- Compatible with 96-well plates, 0.2ml tubes and tube strips
- Protocol optimization selectable from 1 to 24°C across the entire temperature control range from 4-99°C
- Precision temperature control increases both speed and efficiency

TECHNICAL SPECIFICATIONS	
Sample Capacity	1x 96-well plate; 12x 8x0.2ml strip tubes; 96 x 0.2ml tubes
Programmable Temperature Range	4-99.9°C
Temperature Control	calculated or block
Temperature Accuracy / Uniformity	±0.5°C/±0.5°C
Heating / Cooling Method	Peltier
Maximum Heating / Cooling Rate	5°C / 3.5°C per second
Temperature Range of Segment Blocks	30-99°C; temperature of each 6-segment may be set independently
Maximum Temperature Difference Between 6-Segment Blocks	24°C
6-Segment Temperature Block Format	6 segments, each 4x4-well
Programmable Lid Temperature	60-65°C, 90-94°C
Memory	200 complete programmes
Temperature Increments / Decrements	yes
Time Increments / Decrements	yes

Ordering Information			
GTC96S	GTC96S Thermal Cycler with 96-well block, 240VAC	CSL-CLEANCAB	Complete PCR package with low cost clean room. Includes
GTC96S\$	GTC96S Thermal Cycler with 96-well block, 120VAC		CSL-GTC96S, CSL-UVCAB, CV2, CV20, CV200, CV1000 and CV8-200
CSL-PCRKIT	PCR package includes GTC96S thermal cycler, MSMIDI96 96-well		pipettes, MSMIDI96 and nanoPAC-500
	electrophoresis unit and nanoPAC-500 power supply	CSL-CLEANCAB\$	As CSL-CLEANCAB but 120VAC version
CSL-PCRKIT\$	As CSL-PCRKIT but 120VAC version		