



TC-412 Thermal Cycler

Industry Leading Warranty...
4 years or 80,000 cycles





TC412 Thermal Cycler

The **TC-412** is a high performance, high sample throughput instrument at a **highly affordable price.**



Versatile block format

The truly user-friendly fully interchangeable block system allows blocks to be exchanged in a matter of seconds, without the need of any tools (60 x 0.5ml, 96 x 0.2ml, 384-well or flat plate for in-situ).

Adjustable heated lid

Defined pressure, programmable heated lid (100°C to 115°C) to accommodate a variety of consumables.

Intuitive programming

4-line display with intuitive, simple-to-use software with alphanumeric programming, password protection, simple copy/edit functions and much more.

8 Peltiers

Building on the innovative Quad Circuit Technology of the TC-512, the TC-412 ensures unsurpassed control accuracy and temperature uniformity.

Low cost

The TC-412 is one of the most affordable full sized Thermal Cyclers.

PC networking

The TC-412 can be connected to a PC along with other Techne cyclers for low volume or high throughput applications using Gensoft*

* Techne thermal cyclers are PC friendly and can be linked in combination or alone to a PC using Gensoft.

** Available by special order only

Technical Specification

Blocks Formats	
0.5ml capacity	60
0.2ml capacity	96
384-well block	Yes
In-situ block	Yes
User interchangeable	Yes
Block Temperature	
Maximum ramp rate*	2.6°C/sec
Block uniformity at 50°C*	< ±0.3°C
Temperature range	4°C to 99°C
Temperature set point precision	0.1°C
Heated Lid	
Selectable heated lid temperature	100°C - 115°C
Heated lid enable/disable	Yes
Over temperature cut out	Yes
Regulated lid pressure	Yes
Heated lid only comes on if block is set above 35°C	
Programming	
Number of programs*	80
Password protection	Yes
Programming	4-line alphaN
Incremental/decremental temperature	Yes
Incremental/decremental hold time	Yes
Maximum hold time	18 hrs
Minimum hold time	1 sec
Variable programmable ramp rate	0.1°C/sec steps
Run end time calculation	Yes
Pause and stop facility	Yes
End of program alarm (enable/disable)	Yes
Auto restart on power failure	Yes
Miscellaneous	
Serial port	RS232
Dual Voltage (120/230V)	Yes
Temperature sensor	Thermistor
Peltier elements/block	8
Dimensions L x W x H (in inches)	16.5 x 8.6 x 10.2
Footprint L x W (in inches)	16.5 x 8.6
Connection to PC control program	Yes
Free software upgrades from website	Yes
Power consumption	620 Watts
Frequency	50 - 60 Hz
Net weight (in lbs.)	25

Ordering information

Code	Description
FTC41S5D	TC-412 60 x 0.5ml microtubes, 230/115V
FTC41H2D	TC-412 96 x 0.2ml microtubes or 96-well plate, 230/115V
FTC4384D**	TC-412 384-well microtitre plate, 230/115V
FTC41FLD**	TC-412 Flat plate for in-situ, 230/115V

Interchangeable Blocks

FTC41B5D	Block for 60 x 0.5ml microtubes
FTC41BHD	Block for 96 x 0.2ml microtubes or 96-well plate
FTC4B384**	Block for 384-well microtitre plate
FTC41BID**	Flat plate block for in-situ



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)1245 600560

Fax: +44 (0)1245 600030

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.