

TECHNE

Thermal Cyclers

One of the most experienced thermal cycler manufacturers in the world, Techne now has one of the largest, most comprehensive line of PCR machines on the market..



...to suit any budget or application

MIDSCI™

Licensed
for **PCR**

TC-PLUS & TC-PLUS Satellite

Literally stacked with unique features for high-throughput

- 5.7" VGA color touch-screen
- Fast ramp rate of up to 5°C/sec!
- Three gradient block options:
96 x 0.2ml, 60 x 0.5ml & 384-well

Part No.	Description
FTCPLUS/02	TC-PLUS, 96x.2ml
FTCPLUS/05	TC-PLUS, 60x.5ml
FTCPLUS/384	TC-PLUS, 384-well*
FTCSAT/02	TC-PLUS Sat, 96x.2ml
FTCSAT/05	TC-PLUS Sat, 60x.5ml
FTCSAT/384	TC-PLUS Sat, 384-well*



Innovative, stackable design

Front-loading sample drawer integrated with an automatic, non-motorized heated lid allow the TC-PLUS units to stack. With venting and airflow located in the back of the units, the units can be positioned side-by-side to further save valuable bench space!

TERS™ Thermal Energy Recovery System

This new feature of the thermal block harnesses the released heat during the cooling phase for use in the next heating phase, thus saving energy and reducing operational costs!

Fully networkable and PCR† enabled

Each TC-PLUS can be operated as a stand alone unit as well as directly control up to 3 Satellites or 9 via a USB hub. Additionally, the Satellites can also be controlled independently via a PC using the software supplied.

The unique CD-type drawer mechanism utilizes the energy of the drawer being pushed closed to lower the heated lid into the correct position. It accommodates all consumable types: domed or flat caps, heat or adhesive seals! To assist with PCR assay design, a Tm calculator, which uses the Nearest Neighbor algorithm, is included, guaranteeing each experiment is optimized the first time every time!

TC-5000

Touch-screen, gradient

Part No.	Description
FTC5/H02	TC-5000, 96x.2ml
FTC5/05	TC-5000, 60x.5ml
FTC5/384	TC-5000, 384-well*
FTC5/FLAT	TC-5000, Flat plate*
FTC5/F02	TC-5000, 96-well fully skirted*

Graphical display

The 'real-time' graphical display shows the sample temperature profile while the program is running, including the upper and lower limits of the gradient, allowing for instant visualization of your experiment's status.



Wide linear gradient

The most linear 96-well gradient cycler on the market, with an amazing range of 30°C, allowing annealing temperatures to be optimized in a single experiment!

Gradient calculator

The gradient calculator function displays the temperature of each column of tubes, ensuring easy replication of the experimental conditions.

TC-4000

High performance/throughput

Intuitive programming

4-line display with user-friendly software alphanumeric programming, password protection, simple edit functions & much more!

Superb control accuracy and temperature uniformity

Using 8 Peltiers and the innovative Quad Circuit Technology, high reproducibility is ensured through the excellent heating rate and block uniformity.

Part No.	Description
FTC4/H02	TC-4000, 96x.2ml
FTC4/05	TC-4000, 60x.5ml
FTC4/384	TC-4000, 384-well*
FTC4/FLAT	TC-4000, Flat plate*
FTC4/F02	TC-4000, 96-well fully skirted*



TC-3000 Series

Three great personal cyclers to choose from...

- Fast and intuitive programming
- Exceptional block uniformity
- Rapid heating rates
- Small footprint
- Gradient model available

Part No.	Description
FTC3/02	TC-3000, 25x.2ml
FTC3/05	TC-3000, 20x.5ml
FTC3X/02	TC-3000X, 48x.2ml
FTC3X/05	TC-3000X, 30x.5ml
FTC3G/02	TC-3000G, 48x.2ml
FTC3G/05	TC-3000G, 30x.5ml



TC-3000

Reliable, low-cost, personal cycler

Designed with research and teaching laboratories in mind, the TC-3000 offers the ultimate in low cost solutions where ease of use is high on the priority list. Available in 20 x 0.5ml or 25 x 0.2ml interchangeable block formats.

TC-3000X

Same small footprint, but extra capacity

Ideal for laboratories that need just that little bit more, with its expanded sample capacity to accommodate 48 x 0.2ml or 30 x 0.5ml tubes.

TC-3000G

World's smallest gradient cycler

The TC-3000G gradient cycler completes the Techne range of personal thermal cyclers, providing a thermal cycler for all low-throughput applications. All the features of the TC-3000X, plus linear gradient, easy-to-use programming software and a gradient calculator, displaying the temperature for each of the 8 columns.

Technical Specifications

	TC-3000	TC-3000X	TC-3000G	TC-4000	TC-5000	TC-PLUS
Sample capacity (0.5ml)	20	30	30	60	60	60
Sample capacity (0.2ml)	25	48	48	96	96	96
384-well*	No	No	No	Yes	Yes	Yes Flat
plate for in-situ*	No	No	No	Yes	Yes	No
Gradient block	No	No	Yes	No	Yes	Yes
Maximum heating rate**	3.6°C/sec	3.3°C/sec	3.3°C/sec	2.6°C/sec	3.0°C/sec	5.0°C/sec
User interchangeable?	Yes	Yes	Yes	Yes	Yes	Yes
Block uniformity at 50°C	±0.1°C	±0.2°C	±0.2°C	±0.3°C	±0.3°C	±0.3°C**
Temperature range	4°C to 99°C	0°C to 100°C				
Gradient range	n/a	n/a	20°C to 80°C	n/a	20°C to 70°C	Across the full temp. range
Selectable heated lid temp.	100°C to 115°C	35°C to 115°C or OFF				
Heated lid enable/disable	Yes	Yes	Yes	Yes	Yes	Yes
Over-temperature cut-out	Yes	Yes	Yes	Yes	Yes	Yes
Number of programs ¹	80	80	80	80	50	1,000
Maximum hold time	18h	18h	18h	18h	99h	99h 59m 59s
Minimum hold time	1s	1s	1s	1s	1s	0.1s
Auto restart on power	Yes	Yes	Yes	Yes	Yes	Yes
Peltier elements/block	4	6	6	8	8	8
Dimensions, L x W x H, cm	33 x 18.5 x 19	33 x 18.5 x 19	33 x 18.5 x 19	42 x 22 x 26	42 x 22 x 26	37.5 x 27.6 x 31
Power supply	230V/115V	90V to 260V	90V to 260V	230V/115V	230V/115V	100V to 230V
Shipping weight, lbs	17.6	13.2	13.2	28.6	30.8	30.8

*Special order only

**Given are typical values for a standard 0.2ml block in an ambient temperature of 20°C

***Without gradient

¹Actual numbers are dependent upon complexity of the programs.

tPCR is a patented process of Hoffmann-La Roche. Use of the PCR process requires a license.

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