

Techne[®] TC-3000 Thermal Cycler

The TC-3000 is the latest upgrade of the Techne[®] TC-312: one of the best selling, most reliable and inexpensive personal thermal cyclers available on today's market.

Designed specifically to meet the budgets and PCR[®] applications of research and teaching laboratories, the TC-3000 offers all the benefits of the TC-312 to ensure reproducible high performance, including rapid heating and temperature uniformity of the heating block; a robust, spring-loaded heated lid; PC control and fast-programming with free software upgrades. In addition to the TC-3000, Scie-Plas can also offer many other products from the Techne[®] range, including the TC-412 and TC-512 thermal cyclers, hybridisation incubators, Dri-Block[®] heaters, water baths, sample concentrators and biological stirrers. Contact sales@scie-plas.co.uk for a full Techne[®] product catalogue and quotation.

TECHNICAL SPECIFICATION

Programming

Number of Programs	99 (3 segment programs)
Alphanumeric Key Pad	Yes
Program Naming Capability	Alphanumeric
Program Password Protection	Yes
Display	Large 4-line alphanumeric
Maximum Number of Segments/Loops	80
Maximum Number of Repeat Cycles per Program	99
End of Program Alarm	Yes (can be disabled)
Pause Facility	Yes
Incremental/Decremental Timing & Temperature	Yes
Auto Restart on Power Failure	Yes
Run End Time Calculation	Yes
Variable Programmable Ramp Rate Steps	± 0.1°C/sec

Connections and Dimensions

Serial Port RS 232 Socket	Yes
Voltage Selection Switch	Yes
Power Supply	230V
Dimensions (W x L x H)	185 x 305 x 190mm
Footprint	No more than 565cm ²
Net Weight	No more than 5Kg

Block Temperature

No of 0.2ml Wells	25
No of 0.5ml Wells	20
Colour of Wells	Blue/Black
Block Temperature Range	4°C to 99°C
Heating Ramp Rate*	3.6°C/sec minimum
Cooling Ramp Rate 0.2 ml block*	2.0°C/sec minimum
Cooling Ramp Rate 0.5 ml block*	1.8°C/sec minimum
Uniformity at 50 °C	0.2°C
Uniformity at 72 °C	0.4°C
Uniformity at 95 C	1.0°C
Accuracy at 50 °C	± 0.2°C
Accuracy at 72 °C	± 0.4°C
Accuracy at 95 °C	± 0.3°C
Temperature Set Point Adjustment	0.1°C
End of Program Cooling Below Ambient Temperature	Yes to 4°C

*Uniformity is the typical variation in temperature that may occur across the block under ambient conditions of 20°C

ORDERING INFORMATION

Complete System

	Part No.
TC-3000 thermal cycler for 25 x 0.2ml microtubes, 120V / 230V	FTC3/02
TC-3000 thermal cycler for 20 x 0.5ml microtubes, 120V / 230V	FTC3/05

Replacement Parts & Accessories

1 x TC-3000 block for 25 x 0.2ml microtubes	FTC3/02/B
1 x TC-3000 block for 20 x 0.5ml microtubes	FTC3/05/B
1 x PC connection to connect one thermal cycler to PC (RS232 ONLY), includes cable and software	FGEN232
1 x one cycler cable extension set	FGENONE
1 x two cycler cable set	FGENTWO
1 x four cycler cable set	FGENFOUR
1 x ten cycler cable set	FGENTEN
1000 x 0.2ml microtubes	FTUB02TW
1000 x 0.5ml thin walled microtubes	FTUB05TW



BENEFITS INCLUDE

- **Small, low cost** - of the world's best selling thermal cyclers, the TC-3000 is the smallest, most cost-effective unit on the market
- **Available in 25 x 0.2ml or 20 x 0.5ml microtube interchangeable block formats**
- **Fast-track programming with free software upgrades available from the Techne[®] website**
- **Ease of use** - with modern, intuitive programming and ready-to-go templates, creating even the most complicated protocols is simple
- **Reliable, high performance with quality guaranteed** - borne from 20 years' experience of manufacturing thermal cyclers
- **Portable Dual Voltage** - a compact, lightweight unit with a variable voltage selector ensures that it can be transported and used anywhere in the world
- **Unparalleled block uniformity** - ±0.1°C at 50°C, ensuring optimal reproducibility
- **Fast heating rate** - up to 3.6°C/sec heating rate and 2.0°C/sec cooling rate
- **Heated lid** - a selectable temperature range heated lid (+100°C to +115°C) is sprung to fit both 0.2ml domed and 0.5ml flat top tubes
- **Smallest footprint yet** - at only 561cm², the TC-3000 is economical on space
- **PC control & networking** - can be networked together with other Techne[®] cyclers allowing up to 32 cyclers to be connected to one PC
- **Password protection** - protects programs against unwanted modifications
- **4-year minimum warranty**