

S1000™ Thermal Cycler

Bio-Rad's S1000 thermal cycler offers premium thermal performance, whether operated as a stand-alone instrument or connected to a C1000™ thermal cycler as part of a larger multi-bay configuration.

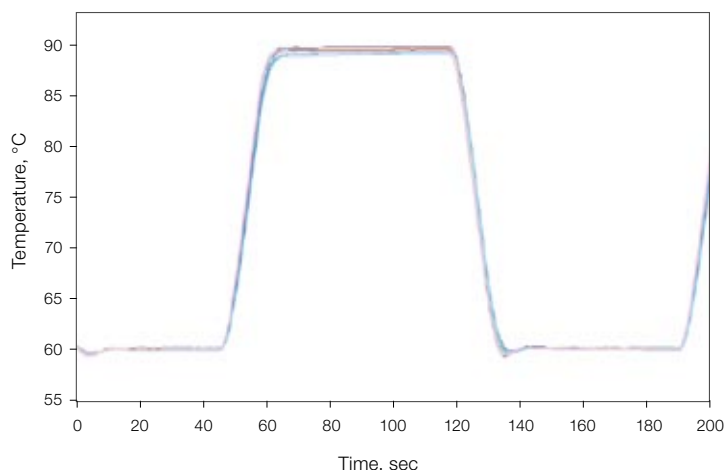
- Innovative engineering delivers exceptional performance and flexibility
- Choice of interchangeable reaction modules includes a gradient-enabled dual 48-well fast module, a gradient-enabled 96-well fast module, and a 384-well module
- Patent-pending thermal electrics and reduced-mass sample block design provide quick time to target temperature for fast protocol run times
- Fully adjustable heated lid accommodates a broad range of vessels
- Optional PC control and networking capability for up to 32 systems enables the ultimate in high throughput



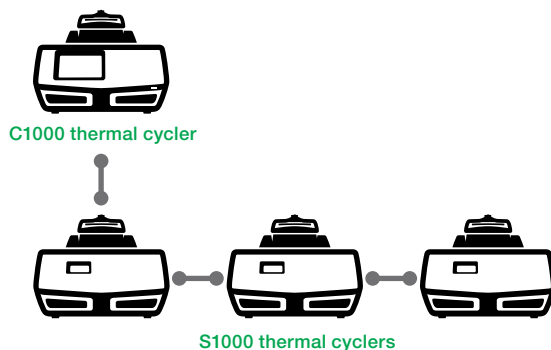
Specifications

Thermal Cycler		(cont.)	
Input power	400 W, maximum	Temperature control modes	Calculated and block
Frequency	50–60 Hz, single phase	PCR license	Yes
Display	LCD	Programming options	Semigraphical, text-based
Ports	4 USB A, 1 USB B	Security features	Password-protected folders
Fuses	2 6.3 A, 250 V, 5 x 20 mm	PC compatibility	With C1000 cycler; Windows XP or higher
Memory	>1,000 typical programs	Instant incubation	Yes
Dimensions (W x D x H)	13 x 18 x 8"		
Weight	24 lb		
Reaction Modules		Dual 48/48 Fast	384-Well
Sample capacity	96-Well Fast 96 x 0.2 ml tubes	2 x 48 x 0.2 ml tubes	1 x 384-well PCR plate
Maximum ramp rate	5°C/sec	4°C/sec	2.5°C/sec
Average ramp rate	3.3°C/sec	3°C/sec	2°C/sec
Temperature range	0–100°C	0–100°C	0–100°C
Temperature accuracy	±0.2°C of programmed target at 90°C	±0.2°C of programmed target at 90°C	±0.2°C of programmed target at 90°C
Temperature uniformity	±0.4°C well-to-well within 10 sec of arrival at 90°C	±0.4°C well-to-well within 10 sec of arrival at 90°C	±0.4°C well-to-well within 10 sec of arrival at 90°C
Gradient capability	Yes	Yes	No
Gradient*			
Gradient accuracy	±0.2°C of programmed temperature at end rows		
Row uniformity	±0.4°C well-to-well (within row) within 10 sec of arrival at target temperature		
Gradient range	30–100°C		
Temperature differential range	1–24°C		

* Gradient specifications apply to 96-well and dual 48-well reaction modules.



Rapid arrival at target temperature and superior uniformity. Graph shows temperature measured by probes in 15 wells across sample block of a 1000-series thermal cycler. Traces are nearly indistinguishable due to high uniformity. Note the consistent ramp rate throughout heating and cooling. 1000-series thermal cyclers exhibit high average ramp rates, rapid settling time, and tight thermal uniformity throughout the ramp, resulting in rapid arrival at target temperature and enabling faster protocol run times.



Expansion capabilities provide the ultimate in high throughput. Up to three S1000 thermal cyclers can be connected to a C1000 cycler to operate as a four-bay instrument. With the addition of a PC and C1000 Manager™ software, up to 32 instruments can be operated in tandem.

Ordering Information

Catalog #	Description
185-2096	S1000 Thermal Cycler With 96-Well Fast Reaction Module , includes thermal cycler chassis, 96-well fast reaction module, power cord, reagent and consumable samples, instructions
185-2048	S1000 Thermal Cycler With Dual 48/48 Fast Reaction Module , includes thermal cycler chassis, dual 48/48 fast reaction module, power cord, reagent and consumable samples, instructions
185-2384	S1000 Thermal Cycler With 384-Well Reaction Module , includes thermal cycler chassis, 384-well reaction module, power cord, reagent and consumable samples, instructions
184-2000	S1000 Thermal Cycler Chassis , includes power cord, instructions; does not include reaction module
184-1000	C1000 Thermal Cycler Chassis , includes USB flash drive, power cord, instructions; does not include reaction module
184-0048	Dual 48/48 Fast Reaction Module , 2 independent 48-well blocks, fits C1000 and S1000 thermal cyclers
184-0096	96-Well Fast Reaction Module , fits C1000 and S1000 thermal cyclers
184-0384	384-Well Reaction Module , fits C1000 and S1000 thermal cyclers
170-8870	iTaq™ DNA Polymerase , 5 U/μl, includes 250 U polymerase, 1.25 ml of 10x PCR buffer (200 mM Tris-HCl, pH 8.4, 500 mM KCl), 1.25 ml of 50 mM MgCl ₂ solution
170-8891	iScript™ cDNA Synthesis Kit , 100 x 20 μl reactions, includes 5x iScript reaction mix, iScript reverse transcriptase, nuclease-free water
172-5301	iProof™ High-Fidelity DNA Polymerase , 2 U/μl, 100 U, includes 5x reaction buffers, MgCl ₂ solution, DMSO
172-5310	iProof HF Master Mix , 100 x 50 μl reactions, includes 2x master mix (0.04 U/μl), DMSO (for highest fidelity with most templates)
TWI-0201	0.2 ml Tubes With Domed Caps , natural, 1,000
TBC-0802	0.2 ml 8-Tube Strips and Domed Cap Strips , natural, 20 bags of 12 8-tube strips and 12 8-cap strips (1,920 tubes and 1,920 caps)
MSB-1001	Microseal® 'B' Adhesive Seals , 100
TCS-0801	Domed 8-Cap Strips , for 0.2 ml tubes and plates, natural, 120
MLP-9601	Multiplate™ 96-Well 0.2 ml Unskirted PCR Plates , natural, 25 plates

Purchase of this instrument conveys a limited non-transferable immunity from suit for the purchaser's own internal research and development and for use in applied fields other than Human In Vitro Diagnostics under one or more of U.S. Patents Nos. 5,656,493, 5,333,675, 5,475,610 (claims 1, 44, 158, 160-163 and 167 only), and 6,703,236 (claims 1-7 only), or corresponding claims in their non-U.S. counterparts, owned by Applied Biosystems. No right is conveyed expressly, by implication or by estoppel under any other patent claim, such as claims to apparatus, reagents, kits, or methods such as 5' nuclease methods. Further information on purchasing licenses may be obtained by contacting the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

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