

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 Touch™ thermal cycler as part of a larger multi-bay configuration.

- Innovative engineering delivers exceptional performance and flexibility
- Choice of interchangeable reaction modules includes gradient-enabled dual 48/48-well fast, gradient-enabled 96-well fast, gradient-enabled 96-deep well, and gradient-enabled 384-well reaction modules
- Patented O-ring hermetic seal* 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 enable the ultimate in high throughput

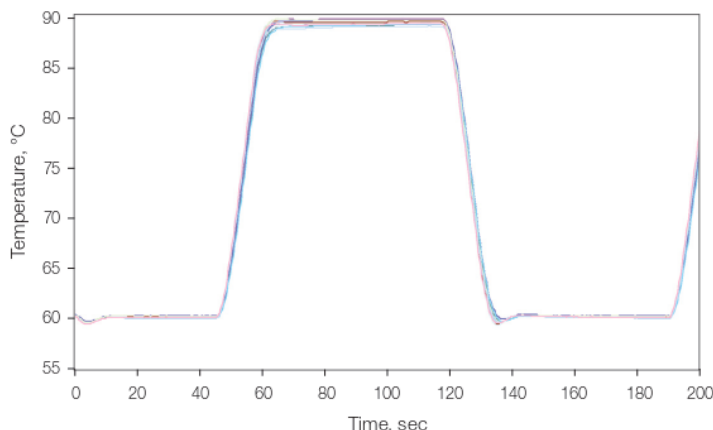


Specifications

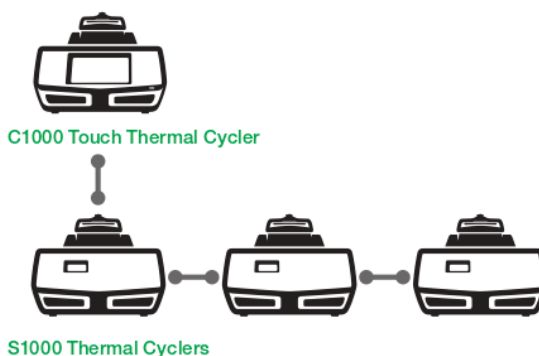
Thermal Cycler				
Input power	Up to 700 W, maximum	Temperature control modes	Calculated and block	
Frequency	50–60 Hz, single phase	PCR license	Yes	
Display	LCD	Programming options	Text based	
Ports	4 USB A, 1 USB B	PC compatibility	Windows XP or higher with C1000™ or C1000 Touch thermal cycler	
Fuses	Two 10 A, 250 V, 5 x 20 mm	Instant incubation	Yes	
Memory	>1,000 typical programs onboard			
Dimensions (W x D x H)	33 x 46 x 20 cm (13 x 18 x 8")			
Weight	10 kg (23 lb)			
Reaction Modules				
Sample capacity	96-Well Fast 96 x 0.2 ml tubes or 1 x 96-well plate	96-Deep Well 96 x 0.2 ml tubes, 48 x 0.5 ml tubes, or 1 x 96-well plate	Dual 48/48 Fast 2 x 48 x 0.2 ml tubes or 2 x 48-well plates	384-Well 1 x 384-well plate
Maximum ramp rate	5°C/sec	2.5°C/sec	4°C/sec	2.5°C/sec
Average ramp rate	3.3°C/sec	2°C/sec	3°C/sec	2°C/sec
Temperature range	0–100°C	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	±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	±0.4°C well-to-well within 10 sec of arrival at 90°C
Gradient capability	Yes	Yes	Yes	Yes
Gradient				
Gradient range	30–100°C			
Temperature differential range	1–24°C			

* U.S. patent 7,051,536.

** U.S. patent 7,632,464.



Rapid arrival at target temperature and superior uniformity. Graph shows temperature measured by probes in 15 wells across the sample block of a 1000-series thermal cycler. Traces are nearly indistinguishable due to the tight 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 Touch cycler to operate as a four-bay instrument. With the addition of a PC and CFX Manager™ software version 2.1 or higher, up to 32 instruments can be operated in tandem.

Ordering Information

Catalog #	Description
184-2000	S1000 Thermal Cycler Chassis , includes power cord; does not include reaction module
185-2148	S1000 Thermal Cycler with Dual 48/48 Fast Reaction Module , includes S1000 thermal cycler chassis, dual 48/48 fast reaction module
185-2196	S1000 Thermal Cycler with 96-Well Fast Reaction Module , includes S1000 thermal cycler chassis, 96-well fast reaction module
185-2197	S1000 Thermal Cycler with 96-Deep Well Reaction Module , includes S1000 thermal cycler chassis, 96-deep well reaction module
185-2138	S1000 Thermal Cycler with 384-Well Reaction Module , includes S1000 thermal cycler chassis, 384-well reaction module
184-1100	C1000 Touch Thermal Cycler Chassis , includes USB flash drive, power cord; does not include reaction module
184-0148	Dual 48/48 Fast Reaction Module , independent dual 48-well reaction module, fits C1000, C1000 Touch, and S1000 thermal cyclers, gradient enabled
184-0196	96-Well Fast Reaction Module , fits C1000, C1000 Touch, and S1000 thermal cyclers, gradient enabled
184-0197	96-Deep Well Reaction Module , fits C1000, C1000 Touch, and S1000 thermal cyclers, gradient enabled
184-0138	384-Well Reaction Module , fits C1000, C1000 Touch, and S1000 thermal cyclers, gradient enabled
170-8870	iTaq™ DNA Polymerase , 5 U/μl, includes 250 U polymerase, 1.25 ml 10x PCR buffer (200 mM Tris-HCl, pH 8.4, 500 mM KCl), 1.25 ml 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	PCR Tubes with Domed Caps (0.2 ml) , clear, 1,000
TBC-0802	8-Tube Strips and Domed Cap Strips (0.2 ml) , clear, 20 bags of 12 x 8-tube strips and 12 x 8-cap strips (1,920 PCR tubes and 1,920 caps)
MSB-1001	Microseal® 'B' Adhesive Seals , optically clear, 100
TCS-0801	Domed 8-Cap Strips , for 0.2 ml PCR tubes and plates, clear, 120
MLP-9601	Multiplate™ 96-Well Unskirted PCR Plates , clear, 25 plates

Windows is a trademark of Microsoft Corporation.

Notice regarding Bio-Rad thermal cyclers and real-time systems:

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 human in vitro diagnostics and all other applied fields under U.S. Patent Number 5,475,610 (Claims 1, 44, 158, 160-163, and 167 only), or corresponding claims in its non-U.S. counterpart, owned by Applera Corporation. 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.

Bio-Rad's thermal cyclers and real-time thermal cyclers are covered by one or more of the following U.S. patents or their foreign counterparts owned by Eppendorf AG: U.S. Patent Numbers 6,767,512 and 7,074,367.

Practice of the patented 5' Nuclease Process requires a license from Applied Biosystems. The purchase of these products includes an immunity from suit under patents specified in the product insert to use only the amount purchased for the purchaser's own internal research when used with the separate purchase of Licensed Probe. No other patent rights are conveyed expressly, by implication, or by estoppel. Further information on purchasing licenses may be obtained from the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.



BIO-RAD

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