specifications

T100™ Thermal Cycler

The T100 thermal cycler is the smart PCR choice. This compact, 96-well thermal cycler offers a comprehensive package of features that makes running PCR easier than ever before. The intuitive touch screen makes it easy to create a protocol, start a run, or manage files, so you spend less time programming or training new researchers. A programmable temperature gradient lets you identify the optimal annealing temperature for a PCR assay in a single run, so you spend less time optimizing.

- Save time programming with the intuitive touch screen
- Get superior results faster by optimizing your PCR assays in a single run using a thermal gradient
- Save valuable benchspace with the compact design
- Keep your protocols organized using personalized folders or a USB flash drive
- Be confident in your results with the reliability you expect from Bio-Rad



Specifications

Thermal Cycler

Input power 100-150 VAC, 50-60 Hz; 220-240 VAC,

50-60 Hz; 670 W maximum

Display 5.7" VGA color touch screen

Port 1 USB A

Fuses Two 6.3 A, 250 V, 5 x 20 mm

Memory 500 typical programs onboard; unlimited with

USB flash drive expansion

Dimensions (W x D x H) 26 x 47 x 23 cm (10 x 18 x 9")

Weight 9 kg (20 lb)

Temperature control modes Calculated and block

PCR license Yes

Programming options Step-based graphical

Reporting Exportable run logs, system logs

Instant incubation Yes

Performance

Sample capacity 96 x 0.2 ml tubes, 0.2 ml tube strips, or

1 x 96-well plate

Maximum ramp rate 4°C/sec
Average ramp rate 2.5°C/sec
Temperature range 4–100°C

Temperature accuracy ±0.5°C of programmed target

Temperature uniformity ±0.5°C well-to-well within 30 sec of arrival at

target temperature

Thermal Gradient

Gradient capability Yes

Gradient accuracy ±0.5°C of programmed temperature

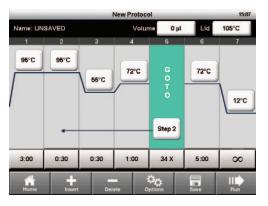
Row uniformity $\pm 0.5 ^{\circ}\text{C}$ well-to-well (within row) within 30 sec

Gradient range 30–100°C
Temperature differential range 1–25°C





T100 thermal cycler Home screen.



Intuitive graphical programming. The thermal cycler's onboard software displays an editable thermal profile of the PCR protocol, making it easy to create and run new protocols.



Saved Protocols screen showing the preinstalled library of standard protocols in the MAIN folder.

Ordering Information

Catalog #	Description
186-1096	T100 Thermal Cycler, includes 96-well thermal cycler, power
	cord, T100 tube support ring
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
	KCI), 1.25 ml 50 mM MgCl ₂ solution
170-8890	iScript [™] cDNA Synthesis Kit, 25 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
HSS-9601	Hard-Shell® Full-Height 96-Well Semi-Skirted PCR Plates,
	clear shell, clear well, 25
MLP-9601	Multiplate™ 96-Well Unskirted PCR Plates, natural, 25 plates
MSB-1001	Microseal® 'B' Adhesive Seals, optically clear, 100
TBS-1201	12-Tube Strips without Caps (0.2 ml), natural, 100 strips
	(1,200 PCR tubes)
TCS-1201	Domed 12-Cap Strips , for 0.2 ml PCR tubes and plates,
	natural, 20
TWI-0201	PCR Tubes with Domed Caps (0.2 ml), natural, 1,000

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.

This product is 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.

Hard-Shell plates are covered by one or more of the following U.S. patents or their foreign counterparts owned by Eppendorf AG: U.S. Patent Numbers 7,347,977; 6,340,589; and 6,528,302.



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