T100™ Thermal Cycler

Specifications

Amplification Bulletin 6060

The T100 thermal cycler is the smart choice for your amplification needs. This modern and compact 96-well PCR instrument offers comprehensive features that make running PCR easier than ever. Start a PCR run or incubation in seconds. Manage your PCR protocols using the large, designed-for-simplicity, color touch-screen user interface. If protocol optimization is required, determine your optimal annealing temperature in a single run using the thermal gradient feature.

- 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; 700 W maximum
Display	5.7 in. VGA color touch screen
Port	1 USB A
Fuses	Two 10 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 in.)
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 range	30–100°C
Temperature differential range	1–25°C

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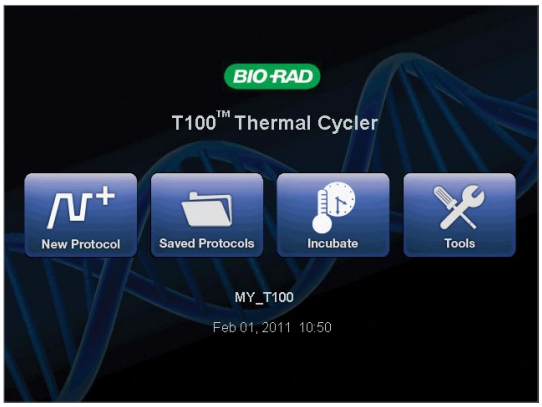
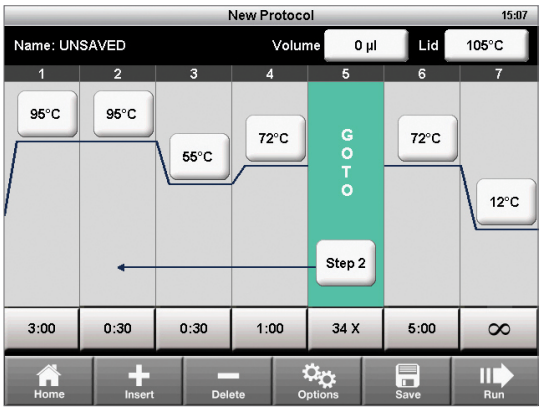
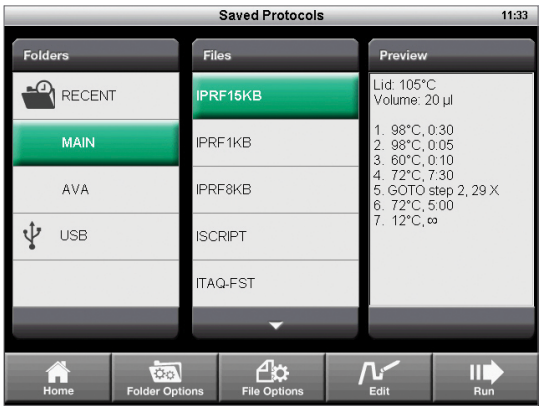


T100 thermal cycler Home screen.



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 KCl), 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® High-Profile 96-Well Semi-Skirted PCR Plates**, clear shell, clear well, 25
MLP-9601	**Multiplate™ 96-Well Unskirted PCR Plates**, clear, 25 plates
MSB-1001	**Microseal® 'B' Adhesive Seals**, optically clear, 100
TBS-1201	**12-Tube Strips without Caps (0.2 ml)**, clear, 100 strips (1,200 PCR tubes)
TCS-1201	**Domed 12-Cap Strips**, for 0.2 ml PCR tubes and plates, clear, 20
TWI-0201	**PCR Tubes with Domed Caps (0.2 ml)**, clear, 1,000

For more information, visit
www.bio-rad.com/web/T100Specifications.

Bio-Rad's 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 iProof and iTaq DNA polymerases 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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