# C1000 Touch Thermal Cycler

#### Amplification

The C1000 Touch Thermal Cycler provides superb thermal performance for fast, reliable results. This fully modular platform supports interchangeable reaction modules, including two optical modules for real-time PCR, that swap in seconds without requiring tools. Equipped with a large state-of-the-art touch screen, the C1000 Touch Cycler offers a choice of programming methods, including graphical and automatic (using the protocol autowriter).

- Interchangeable reaction modules, including 5-color CFX96 optical, 4-color CFX384 optical, gradient-enabled dual 48/48-well fast, gradient-enabled 96-well fast, gradient-enabled 96-deep well, and gradient-enabled 384-well reaction modules
- USB ports that support peripherals, such as storage device and mouse
- Optional PC control and networking capability for up to 32 systems enable the ultimate in high throughput



### **Specifications**

Specifications				
Thermal Cycler				
Input power	Up to 850 W, maximum	Programming options	Step-based graphical and automatic	
Frequency	50–60 Hz, single phase	Security features	Optional log-in required mode for regulated environments	
Display	8.5 in. LCD display and touch screen			
Ports	5 USB A, 1 USB B	Reporting	Exportable run logs, system error logs	
Fuses	Two 10 A, 250 V, 5 x 20 mm	Onboard software	Windows CE 6.0	
Memory	>1,000 typical programs onboard; unlimited with USB flash drive	PC compatibility USB peripheral compatibility	Windows XP or higher Mouse, USB flash drive, barcode reader	
Dimensions (W x D x H)	33 x 46 x 20 cm (13 x 18 x 8 in.)	Real-time PCR upgrade	6-channel, 5-color CFX96 or 5-channel, 4-color CFX384 optical reaction module	
Weight	10 kg (23 lb)			
Temperature control modes	Calculated and block	Instant incubation	Yes	
PCR license	Yes			
Reaction Modules	96-Well Fast	96-Deep Well	Dual 48/48 Fast	384-Well
Sample capacity	96 x 0.2 ml tubes or 1 x 96-well plate	96 x 0.2 ml tubes, 48 x 0.5 ml tubes, or 1 x 96-well plate	2 x 48 x 0.2 ml tubes or 2 x 48-well plates	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			





Bulletin 6095



Quick and easy protocol programming. The protocol autowriter in the cycler's onboard software can automatically suggest a fast temperature protocol based on input parameters. Suggested protocol is based on standard PCR guidelines, with hot-start, initial denaturation, annealing, and extension steps. Further reductions of run times are achieved by minimizing the number of steps and cycles, incubation times, and temperature differentials.



Rapid arrival at target temperature and superior uniformity. Graph shows temperature measured by probes in 15 wells across the sample block of a C1000 Touch 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.



Multi-instrument control. The C1000 Touch Cycler can control multiple thermal cyclers using a single interface.



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## Catalog #

**Ordering Information** 

Catalog #	Description
1841100	C1000 Touch Thermal Cycler Chassis, includes USB flash drive, power cord; does not include reaction module
1851148	C1000 Touch Thermal Cycler with Dual 48/48 Fast
	Reaction Module, includes C1000 Touch Thermal Cycler Chassis, dual 48/48 fast reaction module, USB flash drive
1851196	C1000 Touch Thermal Cycler with 96-Well Fast Reaction
	Module, includes C1000 Touch Thermal Cycler Chassis,
	96-well fast reaction module, USB flash drive
1851197	C1000 Touch Thermal Cycler with 96–Deep Well Reaction
	Module, includes C1000 Touch Thermal Cycler Chassis,
1051100	96-deep well reaction module, USB flash drive
1851138	C1000 Touch Thermal Cycler with 384-Well Reaction
	Module, includes C1000 Touch Thermal Cycler Chassis, 384-well reaction module, USB flash drive
1840148	Dual 48/48 Fast Reaction Module, independent dual
1040140	48-well reaction module, fits C1000, C1000 Touch, and
	S1000 Thermal Cyclers, gradient enabled
1840196	96-Well Fast Reaction Module, fits C1000, C1000 Touch,
1040100	and S1000 Thermal Cyclers, gradient enabled
1840197	96-Deep Well Reaction Module, fits C1000, C1000 Touch,
	and S1000 Thermal Cyclers, gradient enabled
1840138	384-Well Reaction Module, fits C1000, C1000 Touch, and
	S1000 Thermal Cyclers, gradient enabled
1845096	CFX96 Optical Reaction Module, for use with C1000
	Touch Thermal Cycler Chassis, includes CFX Maestro
	Software, license for qbase+ Software, communication
	cable, reagents, consumables
1845384	CFX384 Optical Reaction Module, for use with C1000
	Touch Thermal Cycler Chassis, includes CFX Maestro
	Software, license for qbase+ Software, communication
1700070	cable, reagents, consumables
1708870	iTaq DNA Polymerase, 5 U/µl
1725301	iProof High-Fidelity DNA Polymerase, 2 U/µl, 100 U

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