

**Benchmark** 

# TC 9639

## Gradient Thermal Cycler

+ **Program Wizard**

*Quick and easy protocol entry*

+ **Intuitive touch screen control**

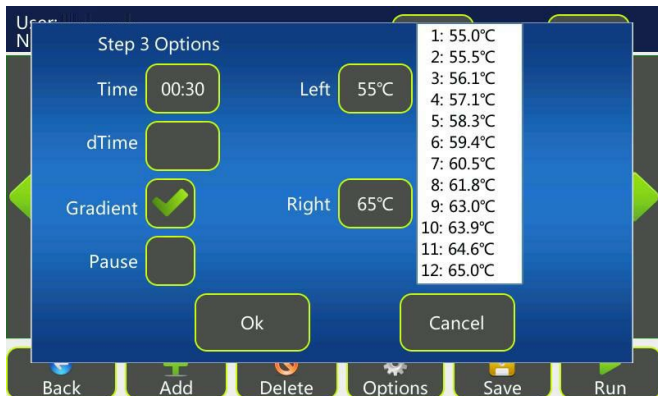
*Works even when wearing gloves*

+ **Multi-Format Block accepts:**

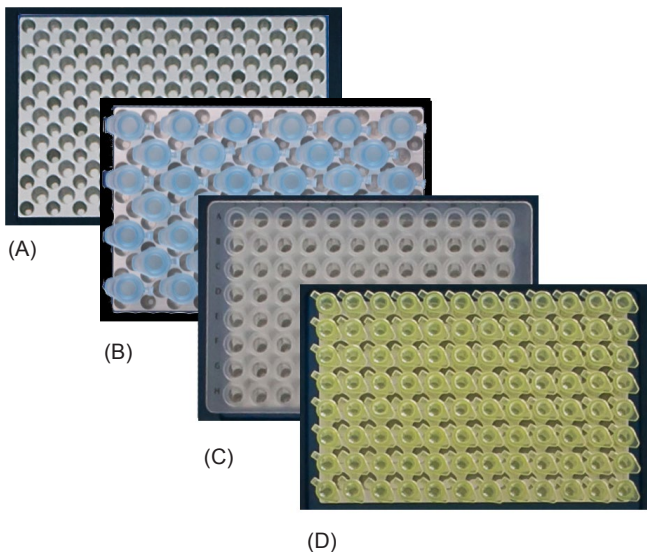
- 0.2ml tubes or strips (96)
- 0.5ml tubes (39)
- 96 well plate



**TC9639**  
Thermal Cycler



Program screen showing gradient options



Multi-format Block

(A) empty block, (B) with 39 x 0.5ml tubes, (C) 96 well plate, (D) 96x0.2ml tubes

Designed for laboratories with medium to high throughput needs, Benchmark's TC9639 Thermal Cycler provides fast, reliable results. Featuring a large, touch screen interface, a next-generation program wizard and a unique multi-format block, this unit makes it easier than ever to get up and running.

A large, **full color touch screen** serves as the operations center where all functions are accessed. Starting at the "Home" screen, simply touch an icon to view the last run, enter the program library or use the program wizard to quickly enter a new protocol. In addition, icons for frequently used programs can be added for instant access.

Designed with extensive user feedback, the **program wizard** quickly and easily guides users through protocol set-up, all in a single screen. Once entered, programs are shown graphically, and can be edited by simply touching the step that requires modification. Time and temperature increments can be built into programs as well as slower ramp rates. Storage capabilities are unlimited; programs can be stored in public folders, password protected folders or on a flash drive. The full virtual keyboard allows for alphanumeric naming of programs and folders.

The **fully adjustable heated lid** prevents condensation and evaporation of samples. Lid temperature can be programmed, and when the block temperature is below 35°C, the lid automatically shuts off. Heating and cooling of the block are precisely and accurately controlled within exceptionally tight tolerances by a proprietary algorithm that simulates sample temperature.

With the **multi-format block**, there is no need for the expense of multiple interchangeable blocks. *The TC 9639 has the flexibility to accept 96 x 0.2ml tubes, a 96 well plate or 39 x 0.5ml tubes, all in the same sample block.* For easy protocol optimization, a gradient with a spread of up to 30°C can be set up across the block. An in situ adapter is available for incubating slides on the block. A 384 well version is available.

**Technical Data:**

Capacity:	
9639 block:	96x0.2 ml tubes/strip tubes or 39x0.5ml tubes or 1 nonskirted 96 well plate
384 well block:	1x384 well plate
In-situ adapter:	4 slides (fits 9639 block)
Temp. control range:	0°-100°C
Temp. control:	Simulated sample or block
Accuracy/uniformity:	±0.2°C/±0.2°C
Ramp rate:	5°C/second (maximum)
Gradient range/differential	30°-105°C, 1°-30°C
Increments/decrements:	Yes, time and temperature
Lid temp.:	30°-112°C, user adjustable
Program memory:	Unlimited with flash drive
Power failure restart:	Yes
Power supply:	Universal, 75-275V, 50-60Hz
Dimensions (W x D x H):	10.2 x 14.2 x 9.9 in. 26 x 36 x 25 cm
Weight:	16 lbs / 7.3 kg

**Ordering Information:**

T5000-96*	TC 9639 Gradient Thermal Cycler with multi-format block
T5000-384*	TC 9639 Thermal Cycler, 384 well block
T5000-A-IS	In situ adapter for 4 slides (fits T5000-96)

\*Supplied with US plug. For EU plug, please add (-E) to item number.