

# Axygen<sup>®</sup> MaxyGene II Thermal Cycler

**AXYGEN**<sup>®</sup>

A Corning Brand

The Axygen MaxyGene II Thermal Cycler brings increased speed and advanced features, providing the premium performance you have come to expect from Axygen brand products.

## Features

- ▶ Unique flexible programming
- ▶ Rapid run times
- ▶ Improved workflow over traditional gradient cyclers
- ▶ Ramping rates up to 5°C/sec.
- ▶ Simple user interface
- ▶ Adjustable heated lid accommodates strips, tubes, and microplates
- ▶ Pre-programmed standard protocols
- ▶ 3-year warranty

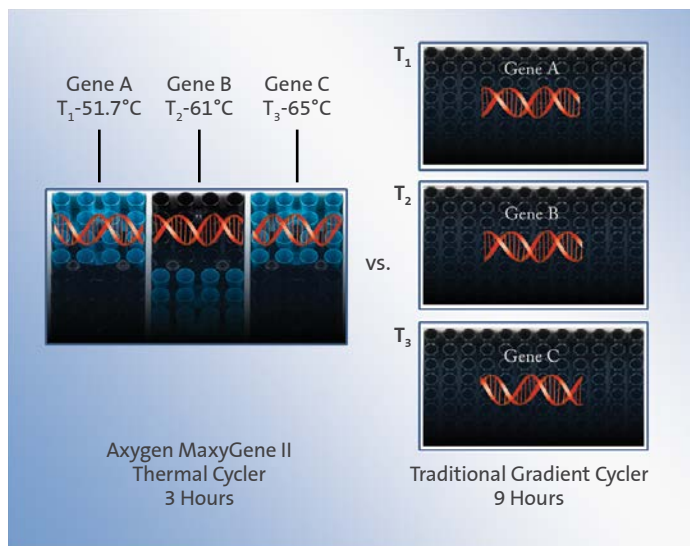
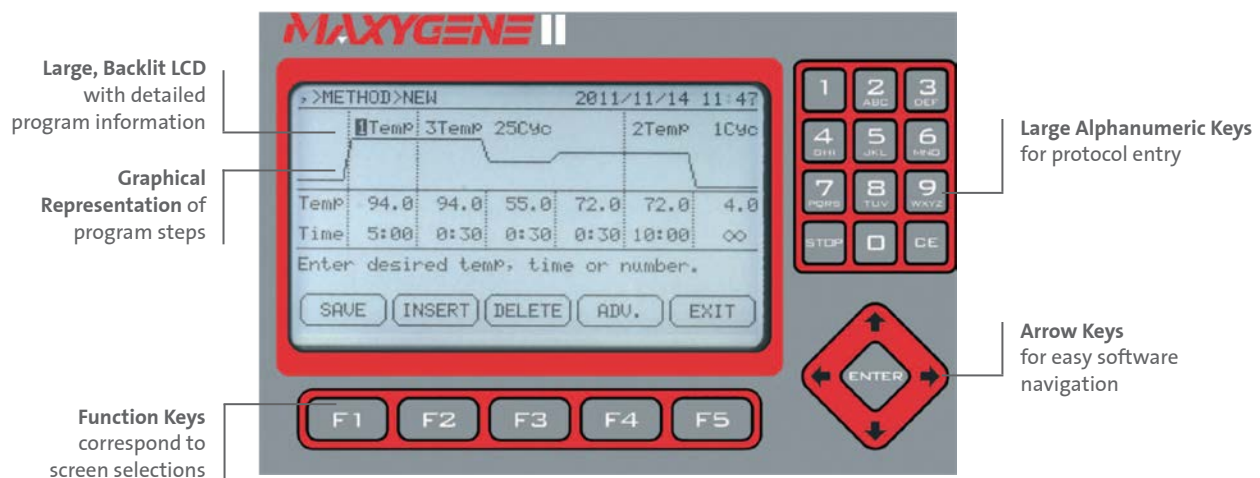


## Simplified Workflow – Improved Throughput

The Axygen® MaxyGene II Thermal Cycler is extremely simple to program, compact in design, and built to perform. This thermal cycler makes method optimization affordable and provides consistent, reliable results. This thermal cycler features, Precision Thermal Control, rapid heating and cooling of the precision-machined sample block by six independently temperature-controlled Peltier modules. A sophisticated algorithm program calculates sample temperature and triggers heating and cooling accordingly, minimizing over- and under-shooting.

The MaxyGene II Thermal Cycler may be programmed to operate between one and six different annealing temperatures across the block (Figure 1). This thermal cycler provides improved throughput by reducing time and simplifies workflow by reducing steps.

A variety of applications can be performed with the MaxyGene II thermal cycler, from single temperature soaks to sophisticated multistep programs. All of these are easily set up. The time or temperature of a cycling step can be automatically increased or decreased during successive cycles. This is useful for “touchdown” applications and for extending annealing times as enzyme is depleted. Programs may also be paused while running. During operation, actual times and temperatures are displayed. Estimated run times are automatically calculated, and a log of the last run can be displayed or downloaded to a printer or PC.



**Figure 1.** Primers designed to anneal to various genes (e.g., Gene A, B, and C) typically have different annealing temperatures ( $T_1$ ,  $T_2$ , and  $T_3$ ). To simplify workflow and increase throughput, the Axygen MaxyGene II thermal cycler can perform up to six different reactions, significantly reducing steps and time.

## Sliding Adjustable Heated Lid

The heated lid, a standard feature of the Axygen® MaxyGene II thermal cycler, is fully adjustable to provide the appropriate pressure for use with different height tubes as well as multiwell microplates. A compression mat is provided to ensure an even pressure is applied when using microplates. For optimum performance, the temperature of the lid may be programmed. To ensure that users never come in contact with the hot surface, the lid slides back and away from the samples. In addition to eliminating the risk of burns, this also provides complete access to samples. The lid can also be flipped up for cleaning.



## Easy Programming

Programming the MaxyGene II thermal cycler is highly intuitive. The large, backlit LCD displays alphanumeric characters and a graphical representation of program steps. Simple, on-screen instructions guide the user through the programming process. The MaxyGene II thermal cycler is provided with common pre-programmed protocols which are easily edited by navigating to the appropriate parameter with the arrow keys and entering a new value. A maximum of 200 programs may be stored in the system memory and organized in public folders or user folders, which can be password protected.

## Unique Block Design

MaxyGene II thermal cycler has 6 separate Peltier elements configured in a 4 x 4 well configuration. Each of these elements allows for selection of distinct user definable annealing temperatures (Figure 1). These regions are easily identifiable by the blue and black squares on the microplate block. The lowest temperature is set in block #1 and each of the other blocks can be set for any temperature within 24°C of block #1. You can use this system for running an entire microplate at one temperature, using the 6 blocks to optimize a reaction, or to run each block as defined by the user.

## Specifications

Sample Capacity	1 x 96-well microplate, 12 x 8 x 0.2 mL strip tubes, 96 x 0.2 mL tubes
Programmable Temperature Range	4°C to 99.9°C
Temperature Control	Calculated or Block
Temperature Accuracy/Uniformity	±0.5°C/±0.5°C
Maximum Heating Range Among the 6 Peltier Blocks	30°C to 99°C
Maximum Temperature Difference	24°C
Ramp Rates	5°C/sec. heating, 3.5°C/sec. cooling
Optimization Technology	Six 4 x 4 Peltier blocks with independently programmable temperatures
Programmable Lid Temperature	60°C to 65°C, 100°C to 115°C
Program Memory	200 complete programs
Temperature Increments/Decrements	Yes
Time Increments/Decrements	Yes
User Program Folders	Yes
Password Protected Programs	Yes
Communication	USB and RS232 ports
Dimensions (W x D x H)	9.4 x 16.9 x 9.8 in. (24 x 43 x 25 cm)
Weight	19.8 lbs. (9 kg)
Electrical	120V or 240V, 50/60 HZ

## Ordering Information

### Axygen® MaxyGene Thermal Cycler II

Cat. No.	Description	Qty/Cs
THERM-1001	MaxyGene II Thermal Cycler with 96-well block, 110V*	1
THERM-1000	MaxyGene II Thermal Cycler with 96-well block, 230V*	1

\*For additional details, visit [www.corning.com/lifesciences](http://www.corning.com/lifesciences).

### Compatible Axigen PCR Products

Cat. No.	Description	Qty/Pk	Qty/Cs
PCR-0208-C	0.2 mL clear thin wall PCR 8-strip tubes	125	1,250
PCR-0208-CP-C	0.2 mL clear thin wall PCR 8-strip tubes and clear 8-strip domed caps	125	1,250
PCR-0208-FCP-C	0.2 mL clear thin wall PCR 8-strip tubes and clear flat 8-strip caps with writing surface	125	1,250
PCR-02-FCP-C	Clear flat PCR 8-strip caps with writing surface	125	1,250
PCR-2CP-RT-C	Clear 8-strip flat caps for real-time PCR	125	1,250
PCR-02-C	0.2 mL clear flat cap thin wall PCR tubes	1,000	10,000
PCR-02D-C	0.2 mL clear domed cap thin wall PCR tubes	1,000	10,000
PCR-96-FLT-C	96-well clear flat top non skirt PCR microplate	25	100
PCR-96-FS-C	96-well clear full skirt PCR microplate	10	50
PCR-96M2-HS-C	96-well clear half skirt PCR microplate with a single notch	10	50
PCR-TS	CyclerSeal sealing film	100	500
UC-500	Ultra clear pressure sensitive sealing film	100	500

For more specific information on claims, visit [www.corning.com/certificates](http://www.corning.com/certificates).

**Warranty/Disclaimer:** Unless otherwise specified, all products are for research use only. Not intended for use in diagnostic or therapeutic procedures. Not for use in humans. Corning Life Sciences makes no claims regarding the performance of these products for clinical or diagnostic applications.

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