

Gradient Cycler Turbo3

Description

High-Throughput Triple-Block Gradient PCR Thermal Cycler.

Turbo3 stands out as the ultimate high-throughput PCR thermal cycler in its class. It has unrivaled flexibility and the capacity to run three distinct PCR protocols at the same time while handling 3 x 48 samples.

Fast gradient optimization and advanced ramp rate control are perfectly tailored to meet specific assay requirements. These features unite to turbocharge your productivity and efficiency.

Specifications

- Triple-Block Flexibility**
 Three distinct PCR protocols can be run at the same time, perfect for multi-user environments and diverse experiments with low samples.
- Fast Gradient Optimization**
 PCR conditions across the three independent blocks are easily adjusted and range from 30 to 100°C with a maximum span of 30°C.
- Advanced Ramp Rate Control**
 Ramp rate can be adjusted from 0.1 to 5.0°C/sec, to accommodate different assays including CRISPR-related experiments.
- High-Throughput Efficiency**
 Maximize throughput with up to 3 x 48 x 0.1/0.2 ml samples.
- Intuitive Operation**
 Effortless programming on a large 10.1" color touch screen with a user-friendly interface.
- Continuous Reliability: Zero Downtime**
 Each of the three independent block modules can be independently calibrated to ensure uninterrupted operation during maintenance.

Optional Equipment

- Tube frame for use to maintain the equilibrium pressure, if the PCR plate is deformed.
- Compression mat
 The 5 mm compression mat must be used to ensure sufficient contact pressure of the heated lid.



Thermal cycler Turbo3



Open thermal cycler Turbo3 with triple block

Thermocycler Turbo3 - Technical Data

Sample Block	
3 x 48 well, Gradient Block	Compatible with 0.2 ml or 0.1 ml PCR tubes, strip-tubes, non-skirted and semi-skirted 48-well plate
Independent Block Operation	Supported
Independent Block Maintenance	Yes (removable blocks)
Block Temperature	
Temperature	4.0 – 100°C
Max. heating rate	5.0°C / sec
Max. cooling rate	3.0°C / sec
Temperature accuracy	± 0.3°C
Temperature uniformity	± 0.4°C
Adjustable ramp rate	0.1 – 5.0°C / sec
Gradient	
Gradient direction	vertical accross the block
Gradient temperature	8 zones per block
Temperature range	30 – 100°C
Temperature difference	max. 30°C
Heater Lid	
Temperature setting range	35 – 120 °C or off
Temperature accuracy	± 1.0 °C
Software	
Portability of protocols	Save and transfer to computer or TurboCycler3 via USB flash drive
Stored program number	> 4000
Registered user folder number	100
User folder password protection	Yes
Run status report	Yes, HTML output and transfer via USB flash drive
Real-Time temp. profile export	Yes, CSV output and transfer via USB flash drive
Tools	Tm calculator, Copy number convertor, Master mix preparation wizard
General Technical Data	
Order Number	112.6015
Display	10.1" color LCD with capacitive touch panel
Data port	1 USB Type A front port for USB flash drive
Auto restart after power outage	Yes
Dimensions (H x W x D)	236 x 356 x 362 mm
Weight	13 kg
Power supply	AC 100-240 V, 50/60 Hz, 1000 W
Certification	CE