

TC2000-G1/G2/G3 Thermal Cycler Gradient

Features

- 10-inch large screen new UI interface, divided into single-channel / dual-channel / three-channel, to meet different experimental requirements
- With advanced gradient temperature control technology, high-performance and long-lasting Peltier refrigeration and heating, which can achieve precise temperature control in zones.
- Multi-channel module design, can run several different PCR gradient programs at the same time, to achieve multi-purpose machine
- Self-adaptive pressure lever hot cap, close and tighten the cap in one step, can be adapted to different heights of test tubes
- Supports up to 199 cycles to perform the next operation, and runs a countdown disc to visually display the remaining time
- Edge temperature compensation technology for good temperature uniformity and gradient settings for easy optimisation of experimental conditions
- Real-time display of the running status of the programme, you can set the security account and password according to customer demand
- Automatic power failure protection, automatically execute unfinished cycles after power restoration to ensure the safe operation of the whole amplification process.
- Hot lid temperature and hot lid operating mode can be set to meet different experimental application requirements
- USB interface, support for U-disk storage/reading PCR data, support for U-disk software update, can be customised to meet the function of multiple file storage, support for Touch down PCR and Long PCR experiments
- Compatible with common 0.2mL PCR tubes, PCR-8Strips and 96-well PCR plates (no skirt, full skirt, half skirt)



TC2000-G1



TC2000-G2



TC2000-G3

Applications

TC2000-G1/G2/G3 is an indispensable laboratory instrument in the field of molecular biology, which can be used for gene sequencing, gene cloning, gene expression, mutation, and plays an important role in various fields such as agriculture, food testing, environmental science, drug development and so on.



Medical Research

For pathogen detection, e.g. gene identification of viruses, bacteria and fungi, mutation analysis of disease-associated genes, gene expression analysis in cancer research, etc.



Biological Research

Genotyping, gene cloning, species identification, evolutionary analyses, and other studies



Forensic Science

DNA analysis of crime scene samples to help identify suspects and provide a basis for public security case detection.



Agricultural sector

For genetic research on crops and livestock, e.g. breed improvement, genetic disease detection, etc.



Food testing

Detection of pathogenic bacteria, genetically modified ingredients in food, etc.



Environmental Science

Analysing microbial communities in the environment and detecting genetic effects of pollutants on organisms.



Drug Development

Screening of drug targets, assessment of drug effects on gene expression.



Genetic studies

Conducting diagnosis and research on human genetic diseases.



Palaeontology

Analyses species identification and classification, development and evolution, extinction event studies and the origin of species in ancient organisms

Specifications

Model	TC2000-G1		TC2000-G2	TC2000-G3
Sample Capacity	96×0.2mL PCR tube 12×PCR-8strips 1×0.2mL 96-well PCR plate		96×0.2mL PCR tube 12×PCR-8strips	96×0.2mL PCR tube 12×PCR-8strips
Module	1×96		2×48	3×32
Sample module temperature control range [°C]			0-105	
Hot lid temperature control range [°C]			30-115	
Temperature display accuracy [°C]			0.1	
Temperature control accuracy [°C]			±0.1	
Temperature uniformity (at 55 °C) [°C]			±0.2	
Maximum rate of temperature change			5°C/Sec	
Gradient Temp Setting Range [°C]			30-105	
Gradient span [°C]	1-42°C, enter 0 to turn off the gradient.		1-25°C, enter 0 to turn off the gradient.	1-25°C, enter 0 to turn off the gradient.
Temperature Control Method			Block/Tube	
Material of the carrier module			Aluminum	
Display			10.1 inches LCD 1280×800	
Input method			Touch panel	
Power off protect			Yes	
Skip to the next step			Yes	
Communication Interface			USB, WIFI	
Number of program storage			20000+ (USB FLASH)	
User Defined File System			Up to 30 steps and 199 cycles in a single program	
Power Supply	100-240V,50/60HZ,600W		100-240V,50/60HZ,1000W	100-240V,50/60HZ,1500W
Dimensions [W×D×H]			310×422×264mm	
Weight			11kg	
Permissible ambient temperature and humidity			5-40°C, 80%RH	