

*At lightning speed  
Do as you please*



## **ArchiCycle intelligent gradient PCR instrument**

**Embark on the intelligent era of gradient PCR**

# Product Introduction

The ArchiCycle series intelligent gradient PCR instrument adopts innovative technologies such as the third-generation sonic temperature control, independent module digital temperature control, and single well assisted heating independently developed by Kunpeng Gene, elevating key PCR performance indicators such as temperature change rate, temperature uniformity and accuracy, and multiple temperature gradients to new heights.

The ArchiCycle series includes three models that can meet the different flux experimental needs of 32 to 96 holes. It is a multi module model equipped with an intelligent user management system and can support independent operation of different experimental processes for multiple accounts, achieving multiple uses for one machine. All models are equipped with a 10 inch high-definition color touch screen and an intelligent operating system, combined with account reservation management function, making your experiments more efficient and convenient.



ArchiCycler 96



ArchiCycler 48D

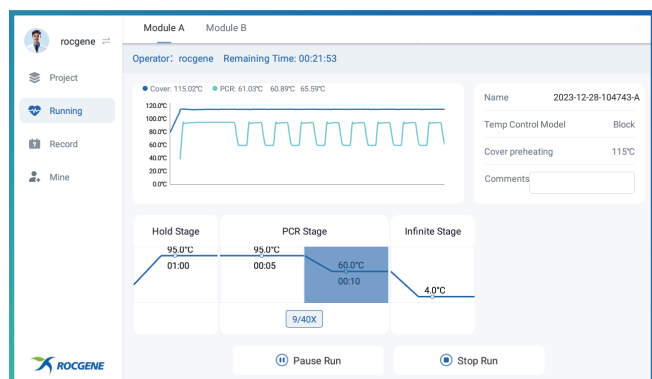


ArchiCycler 32T

## Innovative Design

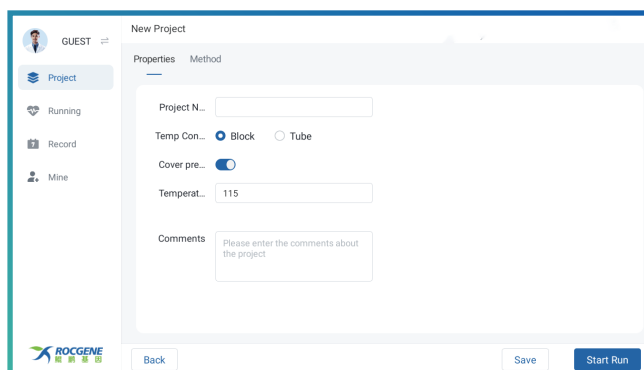
### 01/Temperature control

Adopting the combination of sonic variable temperature and single hole auxiliary heating technology, the temperature rise and fall speed is fast, the temperature is uniform and stable, ensuring excellent repeatability and reliability.



### 02/Heating module

Preheated electronic automatic heat cap with two temperature control modes that can be freely switched for more precise temperature control.



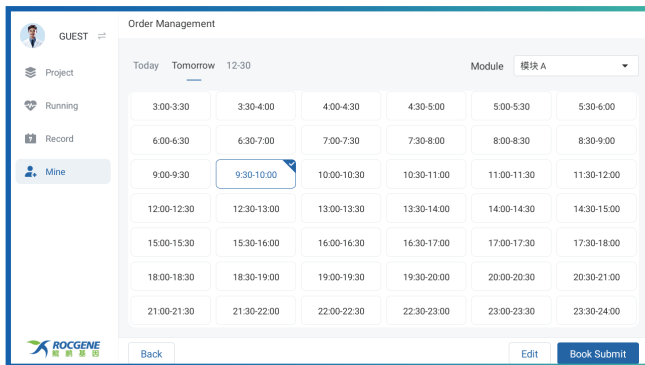
### 03/Functionally gradient

By using physical partition technology, the real temperature gradient can be achieved, and the temperatures in each column can be directly set to make the gradient temperature more free and accurate, meeting more stringent experimental optimization requirements.



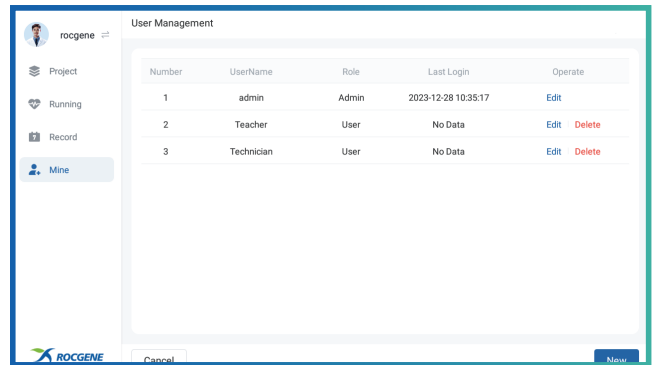
## 04/ Appointment function

Support 72H appointment, more reasonable experimental arrangement, and improve overall usage efficiency.



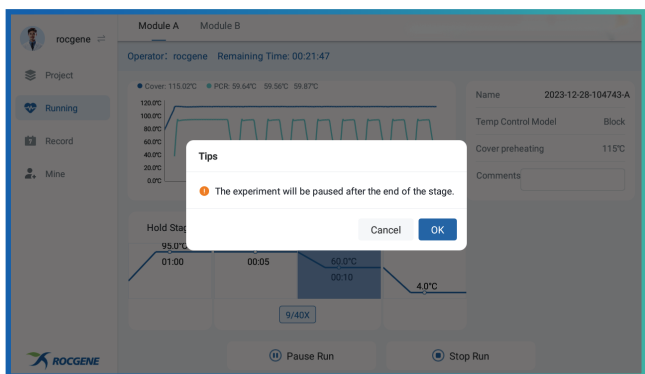
## 05/ Account Management System

Different user accounts are independent of each other to protect experimental data.



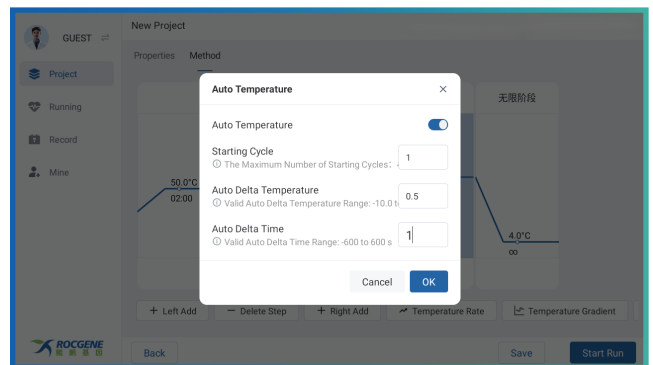
## 06/ Pause and power-off protection

Support pausing and increasing/decreasing cycles during the experimental process; The power outage recovery experiment will continue to protect rare samples.



## 07/ Other experimental applications

The temperature rise and fall speed is adjustable. Can nest multi-level programs to meet various needs such as Long PCR, Touchdown PCR, and nested PCR. Optional cloud connectivity or mobile app features.



## Application Area



### Medical research

Infectious diseases, eugenics and childcare, individualized guidance on medication for tumors, etc



### Basic science

Gene expression, SNP, mutation analysis, drug analysis, etc



### Animal medicine

Animal and pet disease detection



### Epidemic prevention and control

Detection of human infectious diseases and epidemic monitoring, etc



### Food safety

Detection of foodborne microorganisms, GMO foods, meat adulteration, allergens, etc



### Judicial expertise

Parent child identification and identification of physical evidence, etc

# Technical Parameter

Model	ArchiCycler 96	ArchiCycler 48D	ArchiCycler 32T
sample size	10-100µL		
	96 holes x0.1ml/ 0.2mlPCR Single tube, 8-pipe and half skirt edge, 96 hole plate without skirt edge	Double 48holes*0.1ml/ 0.2mlPCR Single pipe, 8-pipe	3 sets of 32 holes x 0.1ml/0.2mlPCR single tube, 8 tubes
	Compatible with executives, short pipes, flat top pipe covers, and round top pipe covers		
Maximum rate	12°C/S		
Maximum cooling rate	7°C/S		
Temperature control zoning	The physical isolation technology is adopted, and the 6 temperature control zones of the same module can be set independently without interference with each other	Adopting physical isolation technology, it supports independent operation of two modules, and each module's three temperature control zones can be set independently without interfering with each other	Adopting physical isolation technology, supporting independent operation of 3 modules, with 2 temperature control zones for each module supporting independent setting of temperature gradients
Common parameters of ArchiCycler series			
Temperature range	0- 105°C	Temperature control method	BLOCK、TUBE
Adjustable temperature rise and fall rate	Yes	Temperature accuracy	±0.2°C
Temperature uniformity	±0.1°C	Temp Accuracy	±0.2°C
Thermal profile	Semiconductor technology	Hot cap technology	Electronic automatic heat cap, highly adaptive, with preheating and automatic closing functions
Hot cover temperature	Supports adjustable temperature range of 30-115 °C	Insulation function	Supports unlimited low-temperature storage at 0-10 °C
Gradient temperature range	4-105°C, Support gradient setting for full temperature control range	Gradient temperature difference range	0.2-101°C, Temperature difference can be set by oneself
Number of stored programs	≥1000results; Unlimited storage can also be downloaded through a USB drive	Single cycle maximum step	Unlimited, supports multiple nested loops
Maximum number of cycles	100 standard cycles Manual input supports up to 1000 loops (nested levels) for nested PCR	Time increase/decrease	1 ~ 600秒, can conduct Long PCR experiments
Temperature increase/decrease	0.1 ~ 10°C, Can conduct Touchdown PCR experiments	Pre-heating	Yes, pause or enter and exit the warehouse midway after reaching the specified preheating temperature to achieve constant temperature function
Pause function	Yes, supports pausing during experimental operation, and can increase/decrease the number of cycles as needed	Modify operating conditions after the experiment begins	Support pausing and modifying subsequent operating conditions after the experiment starts running
Account management function	Different user accounts are independent of each other, supporting separate management for each account	Appointment experiment function	The administrator has the highest management authority, and ordinary users can only control the idle time period or the current account appointment time period
Built in preset program	Built in multiple preset program steps, supporting arbitrary combinations at different stages, simplifying tedious programming steps	Power outage protection and recovery function	After power outage recovery, the instrument restarts and the program supports continued operation
Language settings	English/Chinese	Remote system upgrade, cloud connectivity, mobile app functionality	Optional
Screen display	10 inch high-definition color LCD touch screen	Real time display	Real time graphic and text display of operating status, experimental countdown, and temperature curve of the hot cover/module
USB function	Unlimited import/export program through USB flash drive, supporting software upgrades	Interface	USB, LAN, WIFI, Bluetooth
Product size	455mm*300mm*300mm	Net weight	23kg
Input power supply	220 VAC, 50Hz, 1500VA	Noise	< 55dB

## Ordering Information

Product name	Model	Article number
Single module intelligent gradient PCR instrument	ArchiCycler 96	101034000
Dual module intelligent gradient PCR instrument	ArchiCycler 48D	101034001
Three module intelligent gradient PCR instrument	ArchiCycler 32T	101034002



📍 Building 1, No. 42 Qibei Road, Changping District, Beijing

☎ +86-10-86229225

🌐 www.rocgene.com