

Specifications

Parameters	Size	616×618×787mm
	Weight	100kg
Power Requirements	Voltage	AC 220V±22V
	Frequency	50Hz±1Hz
	Rated Power	650VA
Operating Environment	Ambient Temperature	19°C ~ 25°C
	Altitude	<2000m
	Humidity, RH (Non-condensing)	10% ~ 85% (No condensation)
	Atmospheric Pressure	700hPa ~ 1060hPa
Computer	CPU	Intel CORE i7
	Memory	64GB
	Solid-State Drive	512GB+2T
	Monitor	480GB SSD+2TB HDD or higher
	System	Windows 10 or later versions



Sikun Life Science
Official Account



Sikun Life Science
Official Website

Sikun Life Science Co.,Ltd.

Add. No. 199, 15th Street, National Eco & Tech Development
Area, Zhengzhou, China, 450016
info@sikun.com
www.sikun.com
+86 371 6200 1500

*Refer to Manual for detailed warnings or precautions.
*Internal materials. For discussion purposes only.
*Product specifications and parameters are subject to Manual.
*Specific product appearance shall prevail in kind.



Small in Size
Great in Performance

— An Ideal Testing Platform

Sikun Rapid
GS480

Sikun RapidGS480

Product Introduction

Sikun RapidGS480 is a domestically developed, ultra-fast, compact benchtop gene sequencer designed for small-scale sequencing needs. It enables on-demand, walk-up sequencing without waiting. Equipped with 5 types of flow cell, it supports various read lengths to meet the requirements of targeted sequencing, low-depth whole-genome sequencing, and small-scale genome sequencing in small/medium laboratories such as hospitals, judicial institutions, and CDC facilities. It is an ideal sequencing platform that truly realizes small throughput operation, low cost, and multi-field application.



Performance Parameters

Flow Cell Type	Read Length	Output	Sequencing Time	Sequencing Quality
10M	SE50/SE75/SE100/PE150/PE300	0.5-6G	1.9-28.5h	> 80%~90%
30M	SE50/SE75/SE100/PE150/PE300	1.5-18G	2.1-32.8h	> 80%~90%
50M	SE50/SE75/SE100/PE150	2.5-15G	2.5-22.2h	> 85%~90%
80M	SE50/SE75/SE100/PE150/PE300	4-48G	2.9-41.6h	> 80%~90%
160M	SE50/SE75/SE100/PE150	8-48G	3-22.6	> 85%~90%

*Specifications based on internal reference libraries. Actual performance varies with library quality, insert size and loading concentration.

Product Highlights

01 Throughput: Customizable Throughput for All Scenarios

Designed to break the limitation of fixed high-throughput instruments. Sequencing runs can be tailored to clinical and research needs to maximize data output efficiency.

- 5 flow cell options (10M/30M/50M/80M/160M) for flexible throughput selection
- Multi-read-length support to match varied sequencing demands
- Fully customizable sequencing schemes

02 Speed: Ultra-Fast Sequencing with Reliable Data Quality

Upgrade core systems (flow cell, biochemical reaction, fluidics design, optical detector, etc.) to fully boost the sequencing speed and quality

- Two modes: Rapid Sequencing and Deep Sequencing
- Completes SE50 sequencing in as fast as 1.9 hours
- Q30 ≥90%

03 Operation: Ultra-Simple Interaction, Easy to Master

Pursue "extreme simplicity" with a visualized large-screen interactive guide and automated operations, letting researchers enjoy a hassle-free sequencing workflow

- Full-process graphical guidance & one-click streamlined operation
- Integrated reagent cartridge
- Supports automatic reading of cartridge information via RFID
- Automatic cleaning after sequencing

04 Performance: Fully Self-Engineered, Ultra-Stable Operation

All core modules are independently developed inhouse, delivering full control over R&D, product iteration and quality management to guarantee consistent long-term running performance

- 100% self-developed core hardware modules
- Reliable, uniform sequencing performance batch to batch
- Built-in data encryption to protect genetic information security

05 Cost: Superior Cost Efficiency, Lower Barriers to Sequencing

Full independent R&D enables controllable costs for instruments and supporting consumables, cutting entry thresholds for mid & small diagnostic labs

- Fully controllable supply chain, competitive pricing
- Minimal initial expenditure, flexible sequencing without mandatory sample pooling

Application Examples

Application	Read Length	10M	30M	50M	80M	160M
mNGS (20M/sample)	SE75	—	1	2	4	8
tNGS (1M/sample)	SE75	10	30	50	80	160
Pathogenic bacteria/virus WGS sequencing (1Gb/sample)	PE150	3	9	15	24	48
16S sequencing (0.5M/sample)	PE300	20	60	100	160	320
Tumor Pan-Cancer Methylation (1Gb/sample)	PE150	3	9	15	24	48
Tumor Companion Diagnostic Small Panel (1Gb/sample)	PE150	3	9	15	24	48
NIPT (5M/sample)	SE75	2	6	10	16	32
CNV-Seq (10M/sample)	SE75	1	3	5	8	16
PGT-A (8M/sample)	SE75	1	3	6	10	20
Genetic Disease Diagnostic Small Panel (5Gb/sample)	PE150	—	—	3	4	9

Application Scenarios

■ Pathogen Prevention & Control

Small whole-genome sequencing, pathogen targeted sequencing, and pathogen metagenomic sequencing for various bacteria and viruses (e.g., Streptococcus pneumoniae, HIV, COVID-19, influenza, monkeypox, etc.).

■ Tumor Detection

Tumor companion diagnosis and early screening for different samples (e.g., tissue, blood, etc.).

■ Reproductive Genetics

Applicable to prenatal screening (e.g., NIPT, CNV-seq, PGT-A); targeted sequencing for genes related to hereditary thalassemia, deafness, metabolism, etc.

■ Forensic Identification

Forensic DNA detection and identification targeting genetic markers such as STR, SNP, mtDNA.

■ Environmental Monitoring

Microbiome analysis based on environmental eDNA.

■ Food Safety

Species identification, pathogenic bacteria identification, drug resistance analysis, and microbial metabolic function analysis.

