TIANLONG

INSTRUMENT SERIES

TIANLONG
SCIENCE&TECHNOLOGY

Sample Processing System

▸▸▸ GeneMix Pro

TIANLONG INSTRUMENT SERIES

GeneMix Pro

Automatic Sample Processing System

Maintain sample integrity with a hands-free method of capping and decapping tubes quickly and easily with the Tianlong GeneMix Pro Automatic Sample Processing System. Designed for automating laboratory workflow, GeneMix Pro can process 96 samples within 20min and free professionals from tedious mechanical operations.

The workflow includes automated uncap/recap for sample tubes, sample pipetting and dispensing, Proteinase K/Internal reference reagent loading, automatic mixing of sample tubes. GeneMix Pro can automate laboratory workflow and improve efficiency and safety for medical professionals.

FEATURES

Automate laboratory workflow
With an automated sample preparation process, 96 samples can process within 20 minutes from sample tube scanning to deep well plate scanning

Highly compatible
Compatible with the various specification of sampling tubes and deep-well plates, ready for use with customized specification

Easy of use
"Sample - rack - plate" information scanning automatically, sample to result in closed-loop management can save time and minimize human error

Superior sample protection
With built-in UV light disinfection in the experimental chamber, drop catcher technology and an enclosed design with an internal negative pressure system to ensure sample integrity

SPECIFICATIONS

Product Name	Automatic Sample Processing System-GeneMix Pro
Throughput	96
Handling Time	≤20 minutes for 96 samples
Compatible Sampling Tubes	-Diameter: 13-19mm; Height: 55-115mm -Compatible with 5mL, l0mL and 20mL screwcap sampling tubes; -5-in-l, 10-in-l mixed sampling tubes direct load with cap; -Direct loading with cap for sampling tubes with swab; -Preset with conventional standard sampling tubes, ready for use with customized sampling tubes specifications
Compatible Deep-Well Plates	-6*16T standard ImL deep-well plates -1*96T standard ImL deep-well plates -Compatible with 3mL deep-well plates (including 3 * 8T 3mL large-system deep-well plates of Tianlong) -Preset with conventional standard deep-well plates, ready for use with customized deep-well plates specifications
Pipetting	-Dual independent pipetting modules -Pipetting volume: 5 -1000 μL -Liquid level sensor -Pipetting volume detection
Pipetting Accuracy	5 μL~50 μL: Er: ≤3.5% 50 μL~200 μL: Er: ≤2.5% ≥ 200 μL: Er: ≤2.0%
Pipetting Repeatability/CV	5 μL~50 μL: CV: ≤ 2.5% 50 μL~200 μL: CV: ≤ 1.5% ≥ 200 μL: CV: ≤ 1.0%
Smart Information System	-Sampling tube information scanning (ID code & QR code) -Deep-well plate status identification (open system) /information scanning (Tianlong system) -Automatic barcode scanning of sample racks -"Sample - rack - plate" PCR information scanning, "sample to result" in closed-loop management
Touch Screen	12.1 inch LCD touch screen
Internet Port	USB 3.0/Ethernet port
Dimensions	1130mm(L) x780mm(W) x 920mm(H)
Net Weigh	200Kg
Power Supply	Voltage: 100 - 240 V; Frequency: 50/60HZ; Rated power: 600VA
Temperature	15°C-35°C
Relative Humidity	35%RH-70%RH, non-condensing
Atmospheric Pressure Range	56-106Kpa (Altitude ≤ 4000m)

Nucleic Acid Extractor

- Libex
- GeneRotex 48
- GeneRotex 96
- PANA9600S

TIANLONG INSTRUMENT SERIES

Libex
Nucleic Acid Extractor

Ensure great process safety, high performance, and user convenience for you

Tianlong Nucleic Acid Extractor Libex utilizes the proven magnetic bead method to extract highly purified nucleic acid from a wide range of sample types relevant for molecular diagnostics, genetic identity testing, forensic testing, biomedical research, and gene expression analysis. The combination of easy-to-use instruments with pre-loaded protocols selection, and magnetic bead-based sample preparation kits filled with unique reagents ensure rapid nucleic acid extraction and highly purified products.

FEATURES

Reliable results you can depend on
With magnetic bead-based extraction kits with pre-filled design, experimenters need only one step to start the extraction, which greatly minimizes manual error and ensures high purity of nucleic acid

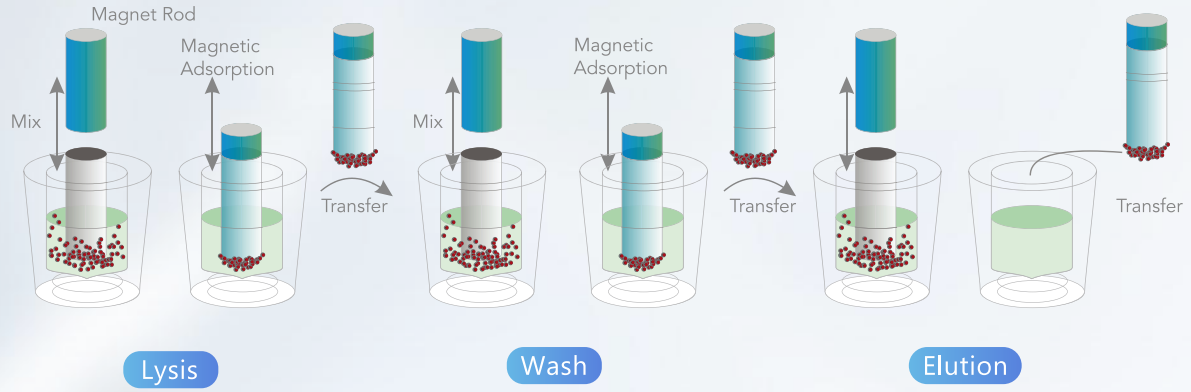
More efficient extraction process
When Libex collocates with pre-filled extraction reagents, 32 samples of nucleic acid for COVID DNA can be extracted within 15 minutes (extraction time varies from reagent to reagent)

More convenient with two configurations
Standalone configuration: Machine keypad operation;
APP control configuration: Cloud-enabled control via Android smartphones/tablets

Efficient contamination control measures
With unique sample cross-contamination control system and UV disinfection function, cross-contamination can be minimized

Simple and remarkable software
With the convenient software based on Android, a protocol can be set up and started with just a few clicks on your phones/tablets. Friendly and intuitive interface make it simple even for first time user

PRINCIPLE

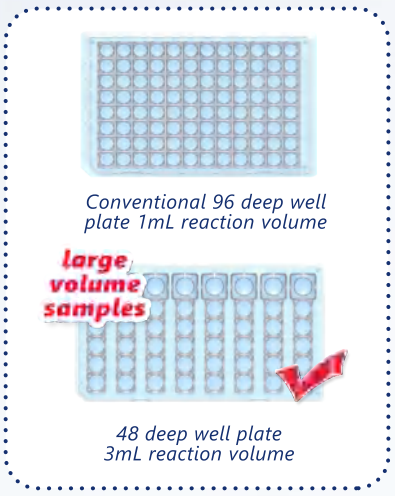


SPECIFICATIONS

Model	Libex
Throughput	1-32
Processing Volume	30-1000μL
Recommended Sample Volume	200μL
Magnetic Bead Residue	≤1%
Suitable Consumables	96-well plates, 6 strip tube
Heating Temperature	Lysis: room temperature to 120°C Elution: room temperature to 120°C
Processing Mode	Multi-mode, multi-speed available
Reagents	Reagents suitable for Magnetic Bead Method
Operation Mode	Mode1: Cloud-enabled control via smart phones/tablets (Android); Mode 2: Machine keypad operation
Experimental Storage	Up to 15 groups of programs saved in device; Up to >500 groups of programs saved in the Android app
Protocol Management	Create, edit, delete, protocol mode
Contamination Control	Built-in UV disinfection module
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off
Connection Port Type	USB
Network Connection	Wifi
Instrument Dimensions	435mm*440mm*445mm (W*L*H)
Weight	31.5kg (net)
Power Supply	AC 100-240V, 50/60±1Hz; 600w
Operating Temperature Range	10~30°C
Operating Humidity Range	20%-85%

GeneRotex 48
Nucleic Acid Extractor

Designed for processing large volume samples with innovative rotary mixing technology



Tianlong GeneRotex 48 nucleic acid extractor is designed with our innovative rotary mixing technology (RMT), which can reduce aerosol generated during the purification process, minimize the risk of false positives caused by cross-contamination, and ensure the accuracy of experiment results. Compatible with Tianlong large volume nucleic acid extraction kits, GeneRotex 48 can greatly improve detection sensitivity and extraction efficiency.

FEATURES

Designed for processing large volume samples
GeneRotex 48 is compatible with Tianlong large volume nucleic acid extraction kits. 1ml sample volume with independent designed consumable makes pathogen detection sensitivity easier than before. Your extraction efficiency can be improved greatly.

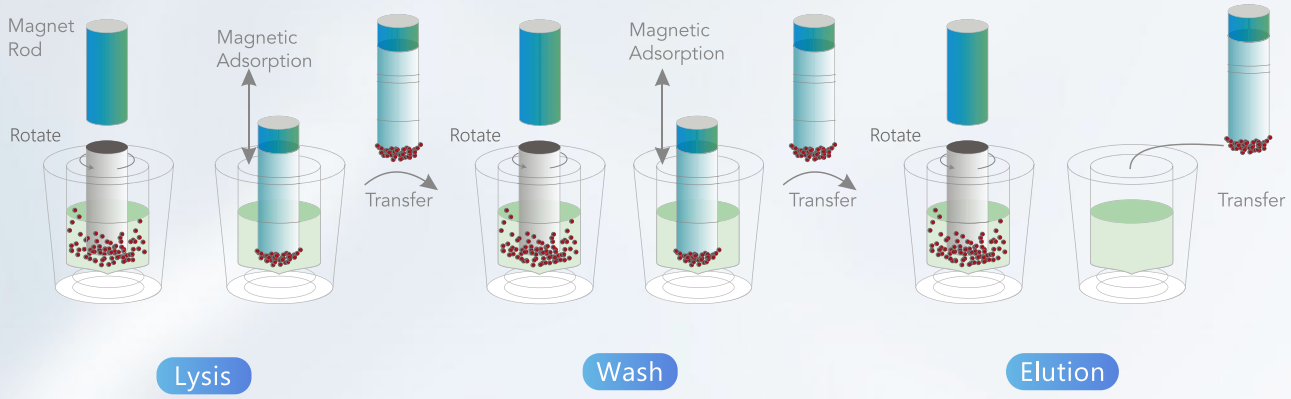
Innovative rotary mixing technology
Based on Tianlong's Innovative rotary mixing technology(RMT), GeneRotex 48 can reduce aerosol generated during the experiment and minimize the risk of false positives caused by cross-contamination while being super quiet during operation

Negative pressure system with HEPA filtration
HEPA
The negative pressure ventilation design with replaceable HEPA filtration can ensure the exhausted air with no biological hazards

High purification and reliable results
Less than 1% residual amount of magnetic beads increase confidence in your experiment result

7 inch color touch screen
7.0"
Built-in 7-inch full-color LCD screen, easy to operate the experiment

PRINCIPLE



SPECIFICATIONS

Model	GeneRotex 48
Throughput	1-48
Reaction Volume	50-3000μL
Sample Volume	1000μL
Compatible Consumables	Customized 48-deep-well plates
Inter-well Extraction Difference	CV <3%
Rotational Speed	≤3000rpm
Heating Temperature	Lysis heating: room temperature to 120°C Elution heating: room temperature to 120°C
Mixing Method	Rotary mixing
Operation Mode	7-inch full-color LCD touch screen operation
Program Storage	Up to 1000 programs can be storaged
Protocol Management	Flexible to create, edit and delete protocols
Automatic Control	Motor-driven automatic opening and closing of the experiment cabinet
Magnetic Bead Residue	≤1%
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off
Contamination Control	Negative pressure HEPA exhaust filter module; Built-in UV disinfection module
Connection Port Type	USB port
Weight	45kg (net)
Instrument Dimensions	510mm*490mm*480mm (W*L*H)
Power Supply and Power Consumption	AC100V-240V,50/60HZ;600VA

GeneRotex 96

Nucleic Acid Extractor

Innovative rotary mixing technology offers high efficiency of nucleic acid extraction and purification

Tianlong GeneRotex 96 nucleic acid extractor is designed with our innovative rotary mixing technology (RMT), which can reduce aerosol generated during the purification process, minimize the risk of false positives caused by cross-contamination, and ensure the accuracy of experiment results. The innovative 6*16 extraction module, compatible with 96-deep-well plates and 6-tube strips, can offer high-throughput extraction and reduce reagent waste without the conventional inconveniences caused by fixed throughput. Flexible and efficient, you can extract from 1 to 96 samples per run with GeneRotex 96.

FEATURES

7 inch color touch screen

Built-in 7-inch full-color LCD screen, easy to operate the experiment

High throughput and efficient extraction

6*16 extraction module with special 96 deep well plate and 6 strip tube designed for GeneRotex 96 to ensure high throughput and reduce reagent waste . You can extract from 1 to 96 samples per run

Innovative rotary mixing technology

Based on Tianlong's innovative rotary mixing technology(RMT), GeneRotex 96 can reduce aerosol generated during the experiment and minimize the risk of false positives caused by cross-contamination while being super quiet during operation

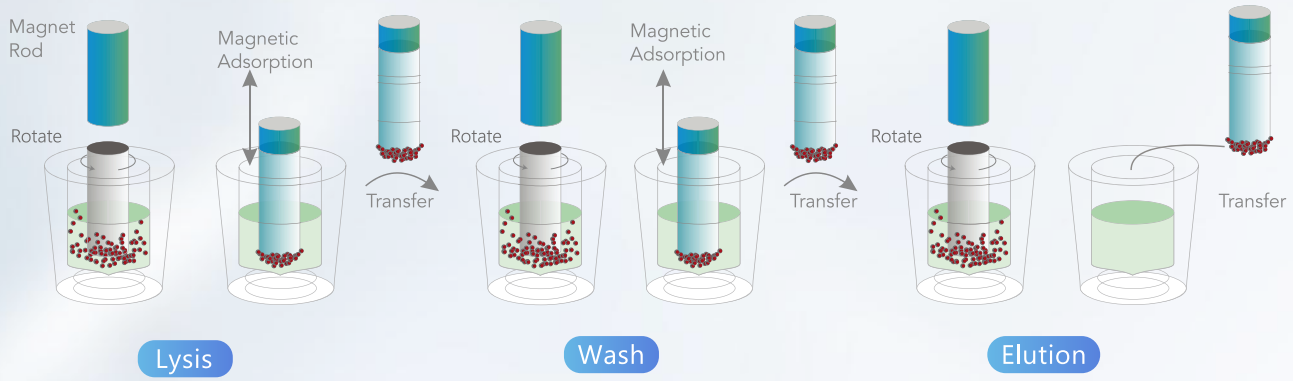
Negative pressure system with HEPA filtration

The negative pressure ventilation design with replaceable HEPA filtration can ensure the exhausted air with no biological hazards

High purification and reliable results

Less than 1% residual amount of magnetic beads increase confidence in your experiment result

PRINCIPLE



SPECIFICATIONS

Model	GeneRotex 96
Throughput	1-96
Reaction Volume	30-1000μL
Sample Volume	200μL
Compatible Consumables	 96-deep-well plates  customized 6 strip tube
Inter-well Extraction Difference	CV ≤3%
Rotational Speed	≤3000rpm
Heating Temperature	Lysis heating: room temperature to 120°C Elution heating: room temperature to 120°C
Mixing Method	Rotary mixing
Operation Mode	7-inch full-color LCD touch screen operation
Program Storage	Up to 1000 programs can be storaged
Protocol Management	Flexible to create, edit and delete protocols
Automatic Control	Motor-driven automatic opening and closing of the experiment cabinet
Magnetic Bead Residue	≤1%
Power Failure Protection	Choose freely whether or not to continue the experiment when the power is on again after cutting off
Contamination Control	Negative pressure HEPA exhaust filter module; Built-in UV disinfection module
Connection Port Type	USB port
Weight	45kg (net)
Instrument Dimensions	510mm*490mm*480mm (W*L*H)
Power Supply and Power Consumption	AC100V-240V,50/60HZ;600VA

PANA9600S

Automatic Nucleic Acid Workstation

Faster and cleaner, leading the new era of rotary nucleic acid extraction

PANA 9600S automatic nucleic acid workstation is designed according to the principles of magnetic beads method and rotary nucleic acid extraction technology. This workstation integrates the workflow of sample information scanning, sample loading, nucleic acid extraction, and PCR system setup, which makes your experiment easy to start and greatly saves time for professionals. With compatible nucleic acid extraction kits, the nucleic acids needed can be extracted quickly and efficiently from various sample types including whole blood, serum and plasma, swab and urine for specific downstream applications.

FEATURES

One-key operation for modularized experiment flow
With one-key operation, automated sample information scanning, sample loading, nucleic acid extraction, and PCR system setup for 96 samples of novel coronavirus can be finished within 50min

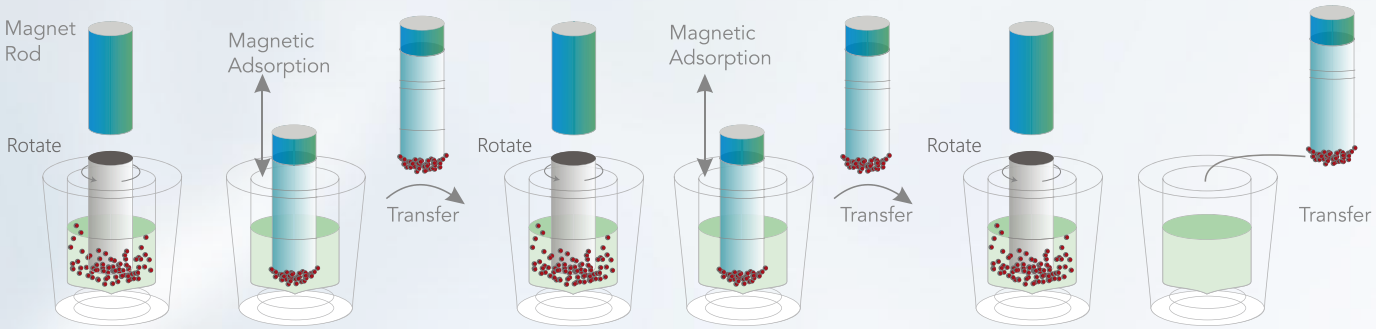
Minimized contamination measures
With rotary nucleic acid extraction, smart drop capture, strict zoning, air filtration, and UV disinfection technology, cross-contamination can be reduced to ensure accurate results

High precision and reliable results
With precise sample loading, accurate temperature ramp control, and precise liquid transfer design, consistent and precise results can be ensured for each of your assays

Highly flexible for your needs
Compatible with various sample types and extraction kits; 4 PCR systems can be set up at the same time

Automated workflow and hands-free operation
Automated barcode scanning for reagent identification, sample loading, nucleic acid extraction, PCR system setup; visualized consumable recognition; easy connection with LIS (laboratory information system)

PRINCIPLE



SPECIFICATIONS

Model	PANA9600S
Sample Capacity	1-96
Technical Principles	Magnetic beads method; Rotary nucleic acid extraction technology
Processing Capacity	Information scanning and nucleic acid extraction of 96 samples per run; 4 different PCR system can be set up
Sample Types	Plasma, serum, whole blood, swab, and urine, etc.
Sample Loading Channels	4
Pipetting Performance	Below 15 μL: accuracy: A≤2.0%, repeatability: CV≤3.0%; 15 μL to 50 μL: accuracy: A≤1.5%, repeatability: CV≤1.5%; Above 50 μL: accuracy: A≤1.0%, repeatability: CV≤1.0%.
Liquid Level Detection	CapSense/Gas pressure sensor
Sample Tubes	Compatible with all types of blood collection tube, 1.5mL and 2.0mL centrifugal tubes, freezing tubes, and sample loading cups, etc.
Temperature Control	Lysis and elution, temperature flexible to control between 35℃ and 120℃
Information Tool	Barcode scanning for reagent identification; visualized consumable recognition
PCR reagent chamber	Avoid light design; power-on automatic refrigeration (4℃ ~ 15℃)
PCR consumables	Compatible with 0.1mL, 0.2mL 8 strip tube, and 96-well plates
Minimized Contamination	Independent closed extraction area,top directional exhaust creates an internal negative pressure system. Sampling device with air tightness and anti-dropping design External droplet catching plate Sterilizing device in experiment cabin and extraction cabin Customized function: directional ventilation system for the nucleic acid extraction area
Information Technology	Scanning the bar codes of multiple samples one by one while sample holder is loaded Information connection of Sample tube-Deep well plate-PCR tube Easy connection with LIS (laboratory information system)
Packaging Information	1370mm(L)*810mm(W)*890mm(H); 220kg(net); 12-inch touch screen, muti-module real-time status monitor

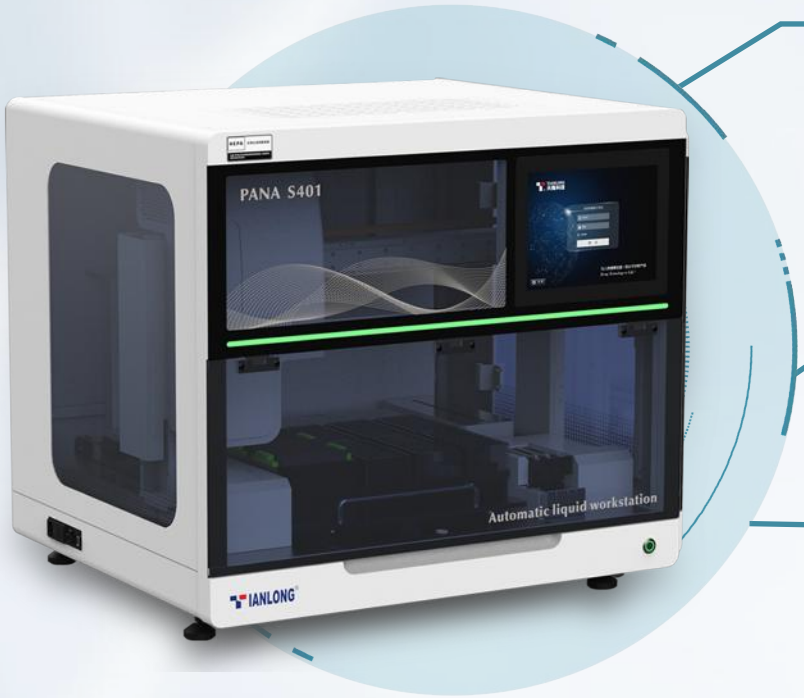
Liquid Handling System

▸▸▸ PANAS401/S201

TIANLONG INSTRUMENT SERIES

PANA S401/S201

Automated Pipetting Workstation



Reagents pre-mixing and aliquoting

Automated PCR setup

Nucleic acid extract retention

Tianlong PANA S401/S201 Automated Pipetting Workstation is designed as an important tool for PCR Setup, which automates tedious, error-prone manual tasks and provides consistent sample mixing and excellent pipetting performance to standardize your results. Tianlong PANA S401/S201 Automated Pipetting Workstation together with the automated nucleic acid extractor and real-time PCR system, a fully automated, high-throughput, and standardized process of nucleic acid detection can be realized in your lab.

PROVIDE INTEGRATED PCR LAB SOLUTION

1 Sample Pre-processing

2 Automated Nucleic Acid Extraction

3 Automated PCR Setup

4 Real-time PC Detection

GeneMix Pro

GeneRotex 96

PANA S401/S201

Gentier 96E

FEATURES

Precise PCR Setup
Automated PCR setup, 2 and 4 channel options, up to 768 samples per setup

Optimized efficiency and standardized procedures
Provide consistent sample mixing and excellent pipetting performance to standardize your results

Highly compatible with various PCR kits
Compatible with regular PCR tubes, PCR strip tubes and PCR plates (up to 384- well x 2)

Excellent anti-contamination measures
Minimized contamination measures like directional exhaust with HEPA filters, internal negative pressure system

User-friendly
Starting preparation programs with just one click, multiple setups for different tests in one run

SPECIFICATIONS

Model	PANA S401	PANA S201 *coming soon*
Sample Loading Channels	4 loading channels	2 loading channels
Throughput	96 samples; up to 768 samples per one go	
Pipetting Volume	1-1000μL	
Tip Volume	5-50μL; 50-1000μL	
Performance	Below 15μL: accuracy: A≤2%, repeatability: CV≤3.0% 15μL-50μL: accuracy: A≤1.5%, repeatability: CV≤1.5% Above 50μL: accuracy: A≤1.0%, repeatability: CV≤1.2%	
Liquid Level Detection	Pressure-sensing level detection; aspiration with the liquid level to ensure accuracy	
Compatible Consumables	Compatible with 0.1mL/0.2mL 8-tube strips, 96-well and 384-well PCR plates	
Operating System	Windows 10 Pro Edition, bilingual interface in Chinese/English	
Connectivity	USB port, RS232 port	
Overall Size	860mm(L)x733mm(W)x746mm(H)	
Instrument Weight	100kg (net)	
Operating Environment	Temperature: 15°C-35°C; humidity: ≤70%	
Power Supply	AC 220V; 50Hz	

Real-time PCR System

- Gentier Mini
- Gentier 48
- Gentier 96

TIANLONG INSTRUMENT SERIES

Gentier Mini

Portable Real-Time PCR System

Portable

Fast

Always Online

Portable, fast, and always online, Gentier Mini is designed for mobile, small laboratories, or on-site testing. With excellent performance and portability, Tianlong Gentier Mini revolutionizes and solves the problem of limited space and fragmented samples in laboratories, and makes your experiments easier to use, more accurate, and more efficient. It can be widely applied in animal disease and infectious disease prevention and control, food safety, scientific research, and other fields. Gentier Mini is now a good companion for animals.

FEATURES

Portable and convenient

Compact and lightweight, Gentier Mini helps save bench space and can be moved flexibly to your mobile laboratory for on-site testing. No need for fluorescence calibration after moving.

1s for 16 wells fluorescence scanning

With 2 fluorescence channels, Gentier Mini can complete all 16 wells fluorescence scanning within 1s, which improves efficiency for lab professionals.

Various control modes

Mode 1: standalone control with 7-inch touch-screen; Mode 2: computer software control; Mode 3: remote control via tablet

Powerful software analysis

Gentier Mini offers multiple functions including qualitative analysis, absolute quantitative analysis, relative quantitative analysis, SNP analysis, etc.

Instant result analysis

Mode1: direct analysis on Gentier Mini and results can be printed directly when connected to a thermal printer; Mode 2: analysis through PC software.

Always online

Various ways to stay online: Wifi, USB and internet interface

SPECIFICATIONS

Model	Gentier Mini
Throughput	1-16
Fluorescence Channels	2
Scanning Time	1s for all wells fluorescence scanning
Dye Compatibility	Channel 1: FAM, SYBR Green Ⅰ, SYTO 9, Eva Green, LC Green Channel 2: HEX, VIC, TET, JOE
Heating Rate	Average heating rate of 3.3℃/s; maximum heating rate of 5.0℃/s.
Cooling Rate	Average cooling rate of 3.0℃/s; maximum cooling rate of 4.0℃/s.
Temperature Accuracy	≤0.1℃
Lightsource	High-brightness, long-life, maintenance-free LED light source
Special Temperature Protocol	Conventional PCR, touchdown PCR, long PCR, etc.
Hot Lid Temperature	40℃-110℃
Control Modes	Mode 1: 7-inch touch-screen of Gentier Mini Mode 2: computer software Mode 3: remote control via Windows tablet
Key Applications	Qualitative analysis, absolute quantitative analysis, relative quantitativeanalysis, endpoint fluorescence analysis, melting curve analysis, and SNP analysis, etc.
Result Analysis	1: Direct analysis on Gentier Mini and results can be printed directly when connected to a thermal printer; 2: Analysis through PC software.
Experiment Files	Files can be downloaded by webpage login
Network Connection	Internet interface, USB, WiFi
Power Failure Protection	Automatically start running experiments after power supply
Specifications and Weight	205mm(L)*156mm(W)*153mm(H)); 3.2kg
Suitable Consumables	0.2mL transparent single tubes and 8-strip tubes

Gentier 48E/48R

Real-time PCR System

The Tianlong Gentier 48E/48R Real-time PCR System incorporates innovative optical technologies with powerful software to provide maximal reliability and efficiency for all your real-time PCR needs. It is designed to meet the needs of small and medium-sized laboratories, mobile laboratories, and on-site testing. With the 4/2 fluorescence channels, Gentier 48E/48R can process 48 samples in one run. It can make your experiments easier to use, more accurate, and efficient of its excellent performance and portability.

Model	Throughput	Gradient	Channel 1	Channel 2	Channel 3	Channel 4
			FAM, SYBR Green I, etc.	VIC,HEX, TET, JOE, etc.	ROX, Texas Red, etc.	Cy5, etc.
Gentier 48E	1-48	Yes	✓	✓	✓	✓
Gentier 48R			✓	✓		

FEATURES

48 samples to be scanned in 2s

Only 2s for all 48 wells of fluorescence scanning can significantly reduce testing time and improve efficiency for lab professionals.

More convenient with two configurations

Standalone configuration: 7-inch touch screen, direct print sample amplification curve, and CT values by connecting to a thermal printer(optional); PC control configuration: PC software control via connection, one PC can max control 10 instruments.

Efficient temperature control

Gentier 48 E/R only takes 40 minutes to complete a standard PCR amplification process. Temperature accuracy is controlled within 0.1°C .

User-friendly and more flexible

Small in size and light in weight, it can be moved flexibly to your mobile laboratory for on-site testing.

Powerful software analysis

Gentier 48 E/R offers multiple functions including relative quantification, absolute quantification, melting curve analysis, SNP analysis, and is compatible with other fluorescence analysis functions based on the isothermal amplification technique.

SPECIFICATIONS

Model	Gentier 48E	Gentier 48R
Throughput	1-48	
Fluorescence Channels	4	2
Fluorescence Scanning Time	2s	
Optical System		
Light Source	High-brightness, long-life and maintenance-free LED light source	
Detector	Photodiodes (PDs)	
Excitation Range	CH1: 470nm CH2:523nm CH3:570nm CH4:638nm	
Detection Range	CH1:525nm CH2:564nm CH3:610nm CH4:685nm	
Fluorescence Dynamic Range	Adjustable	
Sample Dynamic Range	1-10^{10} copies	
Thermal Block		
Heating Method	Peltier	
Heating Rate	≥ 8.0°C/s	
Cooling Rate	≥ 6.2°C/s	
Temperature Accuracy	≤ 0.1℃	
Gradient Range	1°C-40°C	
Gradient Block	8 row	
Special Temperature Protocol	Thermal gradients PCR, Long PCR, Touch Down PCR	
Sample Testing Linearity and Repeatability	Linear correlation: /r/ ≥ 0.999 Repeatability: cycle threshold (Ct) value CV≤ 0.5%	
Software Functions		
Control Modes	Mode1：7 inch touch screen，Mode 2：PC direct control	
Power Failure Protection	Automatically start running experiments after power supply, no need to wait PC software	
Data Storage and Transmission	Upload and download through USB disk,1000 results can be stored in machine	
Reporting Function	Templates reserved; customized experiment report	
Key Applications	Relative quantification, absolute quantification, melting curve analysis, SNP analysis	
Others		
Operating System for PC	Win7/Win10/Win11	
Power Supply and Power Consumption	AC 100-240V, 50-60Hz; 600VA	
Weight	11 Kg (net)	
Instrument Dimension	260*400*260mm (W*L*H)	
Suitable Consumables	0.2mL clear non-skirt 48-well plates, 8-tube strips, single tubes, etc.	

Gentier 96E/96R

Real-time PCR System

The Tianlong Gentier 96E/96R Real-Time PCR System is designed to meet the experimental needs of high-end laboratories. With the 6 (96E)/4 (96R) fluorescence channels, Gentier 96E/96R can process 96 samples in one run. With the powerful and efficient temperature control system, easy-to-use software, user-friendly operational designs, Tianlong Gentier 96E/96R can provide maximal reliability and efficiency for all your real-time PCR needs.

Model	Throughput	Gradient	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6
			FAM, SYBR Green I, SYTO 9, Eva Green, LC Green	HEX, VIC, TET, JOE	ROX, Texas Red, etc.	Cy5	Alexa Fluor 680	FRET
Gentier 96E	1-96	Yes	✓	✓	✓	✓	✓	✓
Gentier 96R			✓	✓	✓	✓		

FEATURES

96 samples to be scanned in 7s

Only 7s for all 96 wells of fluorescence scanning can significantly reduce testing time and improve efficiency for lab professionals.

Efficient temperature control

Based on the Peltier heating/colling method, the maximum heating ramp rate is >6.1°C/s and the maximum cooling ramp rate is >5.0°C/s.

Power failure protection design

Power failure protection design can recover the experiment automatically, with no more concern about instantaneous power failure.

More convenient with two configurations

Standalone configuration: 10.4-inch touch screen, PC control configuration: PC software control via connection

Powerful software analysis

Gentier 96 E/R offers various data analysis functions , including absolute quantitative analysis, relative quantitative analysis, SNP analysis, melting curve analysis, etc.

SPECIFICATIONS

Model	Gentier 96E	Gentier 96R
Throughput	1-96	
Fluorescence Channels	6	4
Fluorescence Scanning Time	7s	
Optical System		
Light Source	High-brightness, long-life and maintenance-free LED light source, excitation from the top	
Detector	Photodiode (PD), top scanning	
Excitation Range	CH1: 465nm CH2:527nm CH3:580nm CH4:632nm CH5:680nm CH6:465nm	
Detection Range	CH1:510nm CH2:563nm CH3:616nm CH 4:664nm CH5:730nm CH6:616nm	
Fluorescence Dynamic Range	Adjustable	
Sample Dynamic Range	1-10^{10} copies	
Thermal Block		
Heating Method	Peltier	
Heating Rate	>6.1°C/s	
Cooling Rate	>5.0°C/s	
Temperature Uniformity	±0.1℃	
Temperature Accuracy	≤0.1℃	
Gradient Range	1°C-40°C	
Gradient Block	12 row	
Special Temperature Protocol	Thermal gradients PCR, Long PCR, Touch Down PCR	
Sample Testing Linearity and Repeatability	Linear Correlation：/r/ >0.999 Repeatability: cycle threshold (Ct) value CV <0.5%	
Software Functions		
Control Modes	Mode1：10.4 inch touch screen Mode 2：PC direct control	
Power Failure Protection	Automatically start running experiments after power supply, no need to wait PC software	
Data Storage and Transmission	Upload and download through USB disk,1000 results can be stored in machine	
Reporting Function	Templates reserved; customized experiment report	
Key Applications	Relative quantification, absolute quantification, melting curve analysis, SNP analysis	
Others		
Operating System for PC	Win 7, Win 10	
Power Supply and Power Consumption	AC 100-240V, 50-60Hz; 900VA	
Weight	30kg (net)	
Instrument Dimension	555mm*475mm*484mm (W*L*H)	
Suitable Consumables	0.2 mL 96-well plates, 8-tube strips, single tubes (clear, frosted and white)	

PCR Thermal Cycler

▸▸▸ Genesy

TIANLONG INSTRUMENT SERIES

Genesy 96T

PCR Thermal Cycler

Ultimate performance to meet your diverse needs

The PCR thermal cycler Genesy 96T from Tianlong is easy to operate with a 7-inch color LCD touch screen. By taking advantage of its excellent thermal block, Genesy brings you homogeneous and accurate temperatures, rapidly and precisely controlled ramp rates, and fast and reproducible PCR cycles. The programming of Genesy is also remarkably simple and intuitive. Thanks to all these advantages, Genesy is your ideal equipment for PCR.

FEATURES

7-inch touch screen operation

With 7-inch LCD touch screen, Genesy can function quickly through simple, one-touch commands. Compact design with small footprint, it is also easy to move.

Gradient temperature control

Genesy block features remarkable gradient technology to ensure ramp rates are identical in both gradient and normal modes. Optimized perform assay crosses a maximal 40℃ range via 12 gradient.

Intuitive software design

Intuitive software design and friendly interface make it simple even for first time users. Specialized user training is not required.

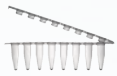
Flexible to share experiment protocols

1000 experiment protocols can be saved in Genesy. Protocols can also share easily between different Genesys via USB flash disk. Personal protocols can be saved in your USB flash disk to quickly set up your own experiment on any Genesys.

Power failure protection design

Unique power-off protection function can save all the set configurations after power-off, and allow the experiment continues when power-on.

SPECIFICATIONS

Model	Genesy
Reaction volume	0-100μL
Thermo block	Aluminum
Compatible consumables	0.2mL single tube  0.2mL 8 strip tubes  o.2mL 96-well plate (skirted, semi-skirted, unskirted)
Temperature control range of the block	4°C-99°C
Temperature control mode	Tube mode & Block mode
Heating technology of the block	Peltier
Gradient block	12 row
Gradient temperature span	1°C-40°C
Gradient temperature range	30°C-99.9°C
Lid temperature range	40-110°C
Temperature uniformity	±0.2°C
Block temperature accuracy	±0.1°C
Heating rate	≥ 3.5°C/s
Cooling rate	≥2.5°C/s
Interfaces	USB, Ethernet
Dimensions(W*D*H)	260mm*400mm*260mm
Weight	11Kg
Power supply	AC 100-240V, 50-60Hz
Max. Power consumption	600VA
Running noise	<55dB

ATP Hygiene Monitoring System

Biolum

TIANLONG INSTRUMENT SERIES

Biolum

Portable ATP Hygiene Monitoring System

Your reliable hygiene safety guardian

Fast
Result in 10s for one test

Powerful Memory Capacity
256 test plans, 256 user IDs, 2000 test program, 1000 results

Sensitive
Detect down to 10^{-16} mol of ATP

User-friendly
3.5 inch high resolution color screen, intuitive menus, less bottoms, simple to use

Template
Pre-configured templates including different industries and locations, together with upper and lower limits can start your test immediately

Connectivity
Connect PC via USB, connect printer or app in Android system mobile phone and pad through Bluetooth

Low Consumption
Using Li-ion battery that can work more than 8h continually

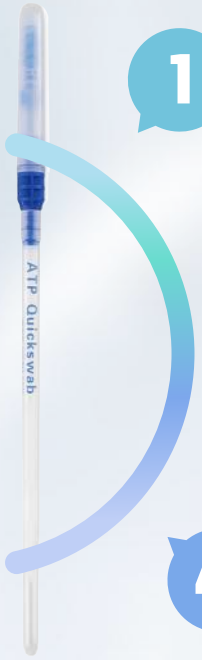
Highly Portable
Within 300g with battery

Biolum Portable ATP Hygiene Monitoring System, a powerful tool for implementing and managing your hygiene monitoring program. Taking advantages of the progressive testing swab, the hygiene level will be evaluated in seconds, and the results can be visualized on screen. Featuring the state-of-art technology, the Biolum is a user-friendly, flexible, and accurate quality monitoring system. It has all the features to maximize its value to your business.

COMPATIBLE SWABS

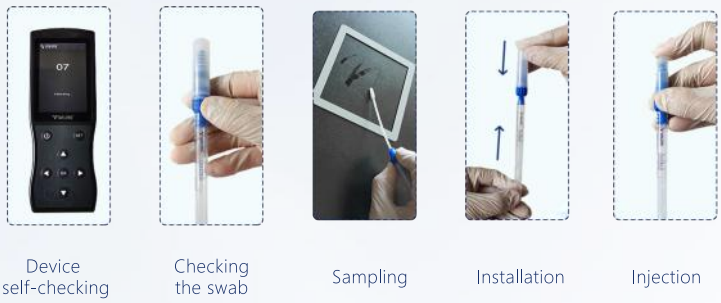
QuickSwab

ATP QuickSwab is simple to use, all-in-one and pen-sized sampling device,with the pre-moistened swab that offers extraordinary accuracy and precision for many Industrial applications.



1. **Sampling&Reaction together,easy to use**
2. **Pre-moistened swab tip**
3. **Accurate, high reproducibility**
4. **10s for one test**

Test Procedure



Device self-checking | Checking the swab | Sampling | Installation | Injection

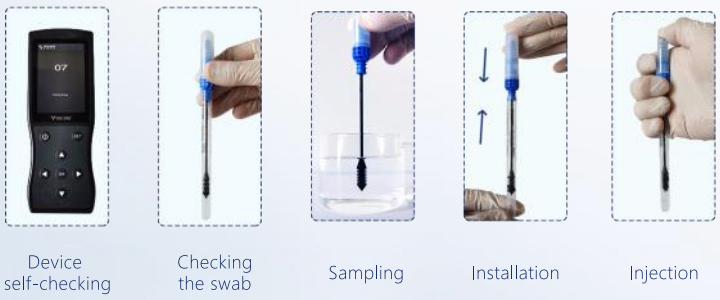
Mixing | Insertion | Measuring

LiquSwab

LiquSwab is an easy to use ATP liquid test work with Biolum Hygiene monitoring system from Tainlong. The swab is available in two formats: Free and Total. LiquSwab Free measures dissolved ATP that is free in liquid(non-microbial ATP). LiquSwab Total measures both free ATP and microbial ATP (non-microbial and microbial ATP) in the liquid. The difference between Total and Free provides an indication of microbial contamination in the samples.

1. **Easy to operate**
2. **10s for one test**
3. **12 month self life at 2-8°C, 4 weeks self life at 21-25°C**
4. **Detects down to 10^{-16} mol ATP**

Test Procedure



Device self-checking | Checking the swab | Sampling | Installation | Injection

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APPLICATION AREAS

Food Processors

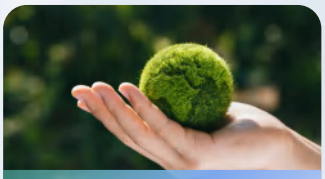
- Cleaning control the process of production and processing
- Evaluating the disinfection of packaging
- Testing the microbes of finished products and material
- Monitoring the hygiene of processing environment

Health Care

- Objects superficial inspection of the hospital major department
- Hand cleaning check of the medical staffs
- Medical equipment cleanliness and disinfection inspection
- Cleanliness testing of the hospital environment

Food Service

- Cleanliness control of the kitchen,dishes,operating carton and tools
- Evaluating disinfection of dishes
- Disinfection control of the airline catering dishes
- Hygiene supervision for quality control department



Environment Protection

- Evaluating biological pollution of the water and wastewater sample
- Detecting the contaminating microorganisms of soil, activated sludge samples and so on

Other Industries

- Daily health products manufacture
- Quality supervision department
- Hospitality industry hygiene management
- The port supervision

SPECIFICATIONS

Model	Biolum
Dimensions	189mmx70mmx35mm
Weight	280g
Detection Limit	10^{-16} moles ATP
Detection Deviation	±5% or±5 RLUs
Self-calibration at Startup	15s or 60s
Real-time Detection Time	10s/test
Memory Capacity	256 test plans, 256 user IDs, 2000 test program and 10000 results
Communication Interface	USB, Bluetooth
Test Repeatability	8%-20%
Correlation Coefficient	$R^2 \geq 0.995$
Power Supply	Rechargeable battery
Running Time	Continuously work for > 8hrs,standby for>600 hrs
Operating Temperature Range	5-40°C
Operating humidity Range	20-80%

Swabs

Cat.No.	Swabs	Specification	Remark
A017H	QuickSwab	20pieces/package	Surface test
A010H	LiquSwab Total	20pieces/package	Liquid test (Total ATP)
A011H	LiquSwab Free	20pieces/package	Liquid test (Free ATP)

Bring Technology to Life!

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