[NMPA | FDA | CE]

- FAST
- EASY
- EFFICIENT
- SAFE
- PRECISE
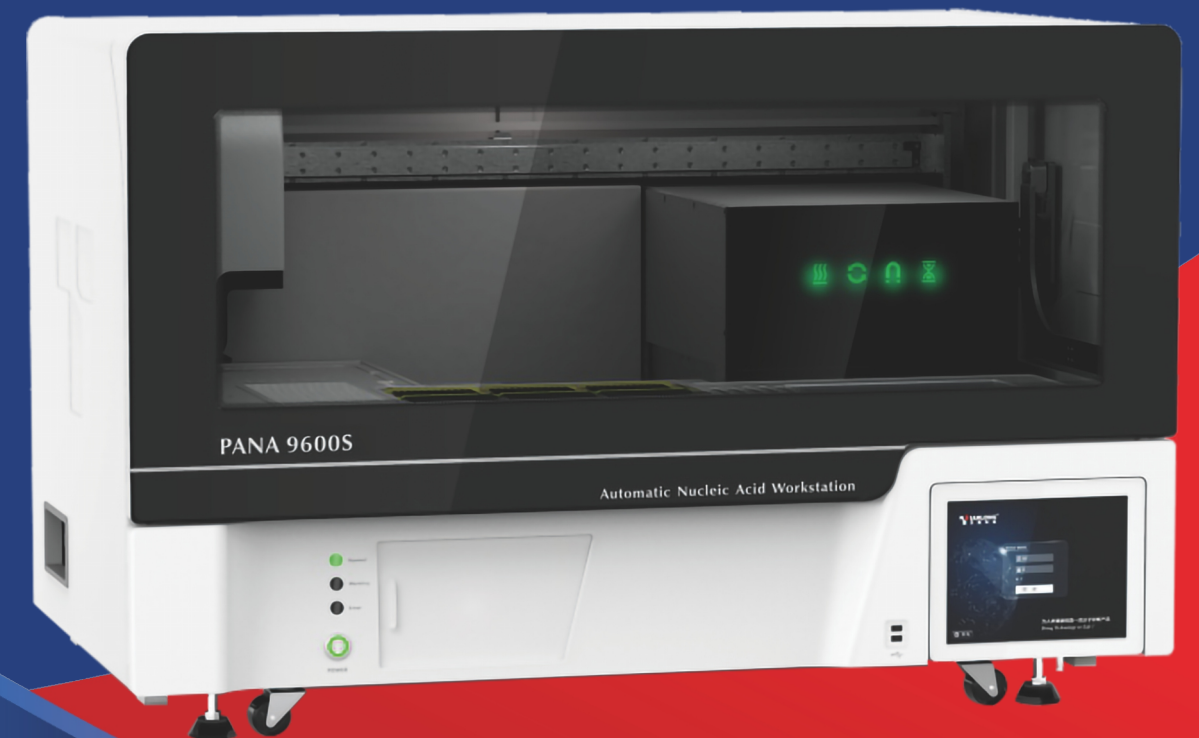
PANA 9600S

Automatic Nucleic Acid Workstation

PANA 9600S
Automatic Nucleic Acid Workstation

Bring
Technology
to Life

The right to change product design and specifications are reserved by Tianlong. Printed in Dec. 2022(Second Edition)

PANA 9600S

**LEADING THE NEW ERA
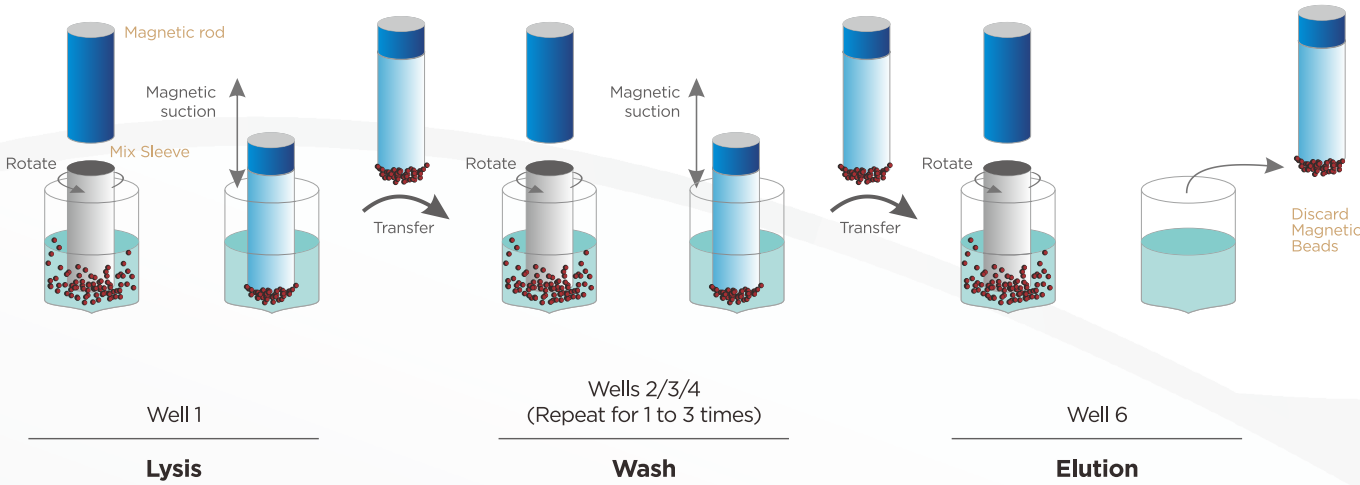OF ROTARY NUCLEIC ACID EXTRACTION**

Supported by the Special Fund for Research on National Major Research Instruments (2012YQ030261)

The project name is: R&D and Application of Automated Nucleic Acid Quantitation and High-Specificity Analysis Instrument

01

TECHNICAL PRINCIPLES

PANA 9600S automatic nucleic acid workstation is designed and developed according to the principles of magnetic beads method and rotary nucleic acid extraction technology by Tianlong (Patent number: ZL201710435931.8). This workstation integrates the workflow of sample information scanning, sample loading, nucleic acid extraction, and PCR system set-up, etc. With compatible nucleic acid extraction kits, the required nucleic acids can be extracted from various common samples including whole blood, serum and plasma, swab and urine very quickly and efficiently for specific downstream applications.

MODULARIZED EXPERIMENTAL FLOW

HIGH PRECISION

Sample Information Scanning

Sample Loading

Nucleic Acid Extraction

Set Up PCR System

ONE-KEY OPERATION

TRACEABLE

Magnetic rod

Magnetic suction

Mix Sleeve

Rotate

Transfer

Magnetic suction

Rotate

Transfer

Rotate

Discard Magnetic Beads

Well 1

Lysis

Wells 2/3/4
(Repeat for 1 to 3 times)

Wash

Well 6

Elution

Basic Technical Principle of Nucleic Acid Extraction

Gentier 96E

Real-time PCR

HIGH-PERFORMANCE FEATURES
OF PANA 9600S

◎ Sample information scanning and management tool, easy connected with your LIS (Laboratory Information System) and TianLong Gentier 96 series

◎ Reagent information bootscan and alert, with automated program analysis

◎ Visualized automatic material test technology (visualized status monitoring of all consumables)

◎ Intelligent drop catcher technology

◎ Strict zoning and cross-contamination control

◎ Non-contact accurate temperature control to ensure consistency between experiments

◎ Precise liquid transfer design

◎ Rotary mixing extraction can protect nucleic acids

AUTOMATED MASTER
WORKSTATION FOR YOUR LAB

Minimized Contamination
Designed to reduce cross-contamination by rotary nucleic acid extraction, smart drop capture, strict zoning, air filtration, and UV disinfection.

Fast and High-Throughput
Sample loading, nucleic acid extraction and PCR system setup for 96 COVID testing samples completed within 45min.

Highly Flexible for Your Needs
Supporting a wide range of sample types, compatible with various extraction reagents. Multiple setups for different PCR tests in one go.

Accurate and Reliable
Precise sample loading, accurate temperature ramp control, to enable consistent results for each of your assays. Even super-reliable with compatible kits by Tianlong.

Easy-to-Use and Automated Workflow
Prepackaged extraction kits, automated workflow of PCR system setup, proteinase K dilution, sample and product retention for your hands-free operations.

PANA 9600S

LAB APPLICATIONS

PANA 9600S in Green Cross Laboratory (South Korea)

PANA 9600S in Tongji Hospital (Wuhan, China)

PANA 9600S in UENO Royal Hospital (Japan)

PANA 9600S in the nucleic acid testing lab at Soekarno-Hatta International Airport (Indonesia)
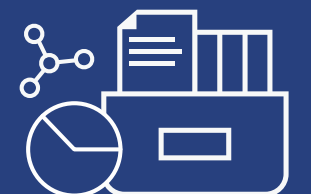
SARS-CoV-2 | HBV | HCV | HIV | Flu Virus | HPV | HCMV | EB Virus | MP | ......

PANA 9600S in Huamei Hospital, University of Chinese Academy of Sciences (Zhejiang, China)

Sample Capacity	96
Function	Sample information scanning, sample loading, automated nucleic acid extraction, PCR system setup.
Technical Principles	Magnetic beads method and rotary nucleic acid extraction.
Setup Capacity	192 PCR tubes with 96 samples per run.
Types of PCR system	Multiple different PCR systems can be allowed per run.
Sample Types	Plasma, serum, whole blood, swab, and urine, etc.
Sample Loading Channels	1 to 4
Pipetting Performance	Below 15μL: accuracy: Er≤2.0%, repeatability: CV≤3.0%; 15μL to 50μL: accuracy: Er≤1.5%, repeatability: CV≤1.5%; Above 50μL: accuracy: Er≤1.0%, repeatability: CV≤1.0%.
Liquid Level Detection	Capacitive sensing, pressure sensing.
Sample Tubes	Compatible with all routine blood collection tubes, 1.5mL and 2.0mL centrifugal tubes, freezing tubes, and sample loading cups, etc.
Temperature Control	Two steps of lysis and elution, flexible between 35℃ and 120℃.
Information Tool	Barcode scanning for reagent identification; visualized status monitoring of all consumables.
PCR reagent chamber	Light-proofing design; automatic cooling on start-up (4℃ ~ 15℃).

PCR consumables	Compatible with 8-tube strips of 0.1mL and 0.2mL, and 96-well plates.
Minimized Contamination	(1) Separated and enclosed nucleic acid extraction area, with directional exhausting and negative pressure system; (2) Sample loading with airtightly drip-proof design; (3) External droplet capture tray; (4) UV lights in the experiment, extraction, and waste chambers sterilization; (5) Customized function: directional ventilation system for the nucleic acid extraction area.
Scan And Start	(1) When loading the samples, PANA 9600S scans the sample tubes and the sample location information (sample tube - deep-well plate - PCR plate) is visualized accordingly. (2) Tianlong Gentier 96 series can simply run the experiments based on the sample testing program templates shared simultaneously by PANA 9600s. (3) Sample information linked to LIS.
Packaging Information	1370mm(L)*810mm(W)*890mm(H); 220kg(net); 12-inch touch screen, muti-module real-time status monitor.

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Bejing Anzhen Hospital (CCTV Live News)

Wuhan Tongji Hospital (CCTV News Broadcast)

Wuhan Tongji Hospital (Joongang Tongyang Broadcasting Company, South Korea)

Wuhan Union Hospital (The People's Daily)