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# MGISP-NEX

Automated Nucleic Acid Extractor

For research use only.



- |  |   |
|--|---|
| <b>① Barcode Scanner</b><br>Rapid scanning for tube barcode                          | <b>⑤ Temp. Control Module</b><br>Cryogenic storage of reaction reagent                    |
| <b>② 8-channel Pipettor</b><br>Pipetting distance, volume and height are independent | <b>⑥ Magnetic Rod Module</b><br>Interchangeable 24 & 96 magnetic rod heads                |
| <b>③ Rotatable Gripper</b><br>Real-time sensing of the grasping status.              | <b>⑦ UV System</b><br>The dose of irradiation is higher than 100,000 $\mu\text{W.s/cm}^2$ |
| <b>④ Shield Plate</b><br>Prevent cross-contamination within the experiment           | <b>⑧ HEPA System</b><br>Efficient filtration to prevent contamination                     |



# MGISP-NEX

## Automated Nucleic Acid Extractor

MGISP-NEX is a versatile automated nucleic acid extractor independently developed by MGI. It equips with an independent 8-channel pipettor and interchangeable magnetic rod modules: 24 magnetic or 96 magnetic rod heads.

MGISP-NEX is an automated nucleic acid extractor with several key functional modules. By virtue of the automation and flexibility, MGISP-NEX supports a variety of applications.

### Oncology Research

- Liquid biopsy
- Colorectal cancer research

### Infectious Research

- Respiratory pathogen research
- HBV, HCV, HIV research
- HPV research

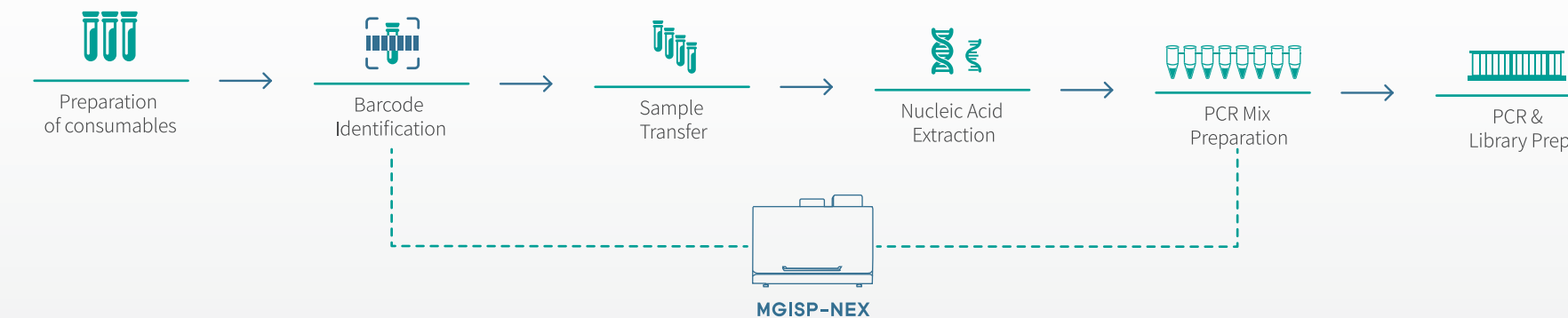
### Reproductive Health Research\*

- NIPT
- Thalassemia research
- Deafness research

### More Research

- Animal breeding
- Plant breeding
- Customizable applications

\*For research use only. Not for use in diagnostic procedures.



## Multifunctional

### Whole Extraction

- **Before Extraction:** sample transfer, sample mixing, reagent aliquoting;
- **During Extraction:** auto-loading magnetic rod sleeves, incubation, etc.;
- **After Extraction:** transfer nucleic acid, set up enzyme reaction, etc.;

## Informationalized

### Whole Experiment

- **Before Experiment:** track sample information;
- **During Experiment:** track reagents and consumables information;
- **After Experiment:** track whole process' s running information.

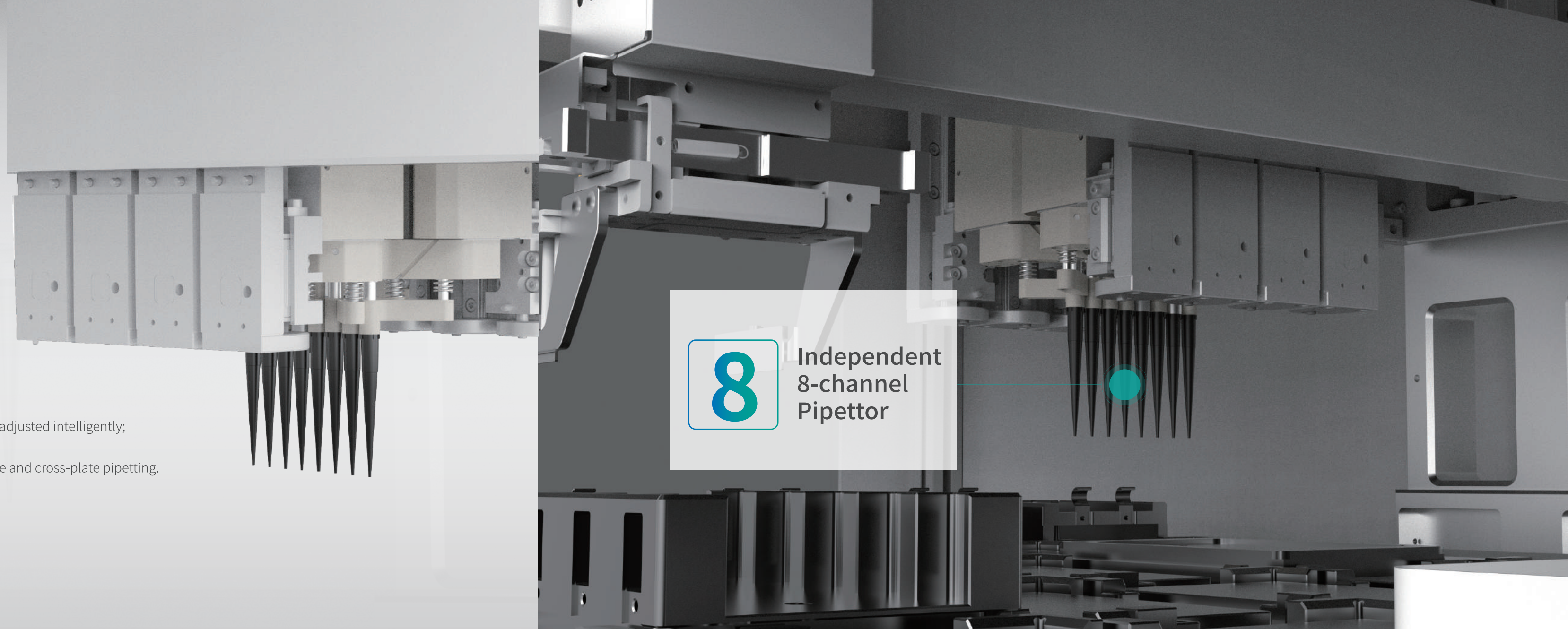


# Flexible Pipetting

Based on an independent 8-channel pipettor

MGISP-NEX has eight independent pipetting channels. Its pipetting based on air displacement, which ensures stability and accuracy.

- **Pipetting Channel:** independent 8-channel pipettor;
- **Pipetting Range:** 1  $\mu\text{L}$ -1000  $\mu\text{L}$ ;
- **Unequal Volume Pipetting:** from 1  $\mu\text{L}$  to 1000  $\mu\text{L}$  volume;
- **Unequal Height Pipetting:** the pipette height of each channel can be adjusted intelligently;
- **Unequal Distance Pipetting:** from 9 mm-480 mm allows for cross-tube and cross-plate pipetting.



Independent  
8-channel  
Pipettor

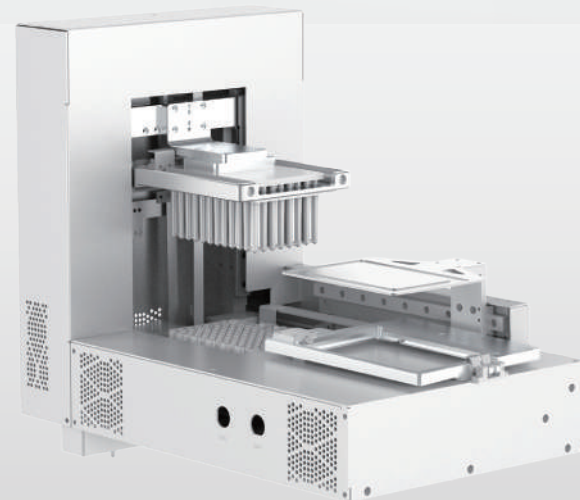


# Efficient Extraction

Based on a replaceable magnetic rod module

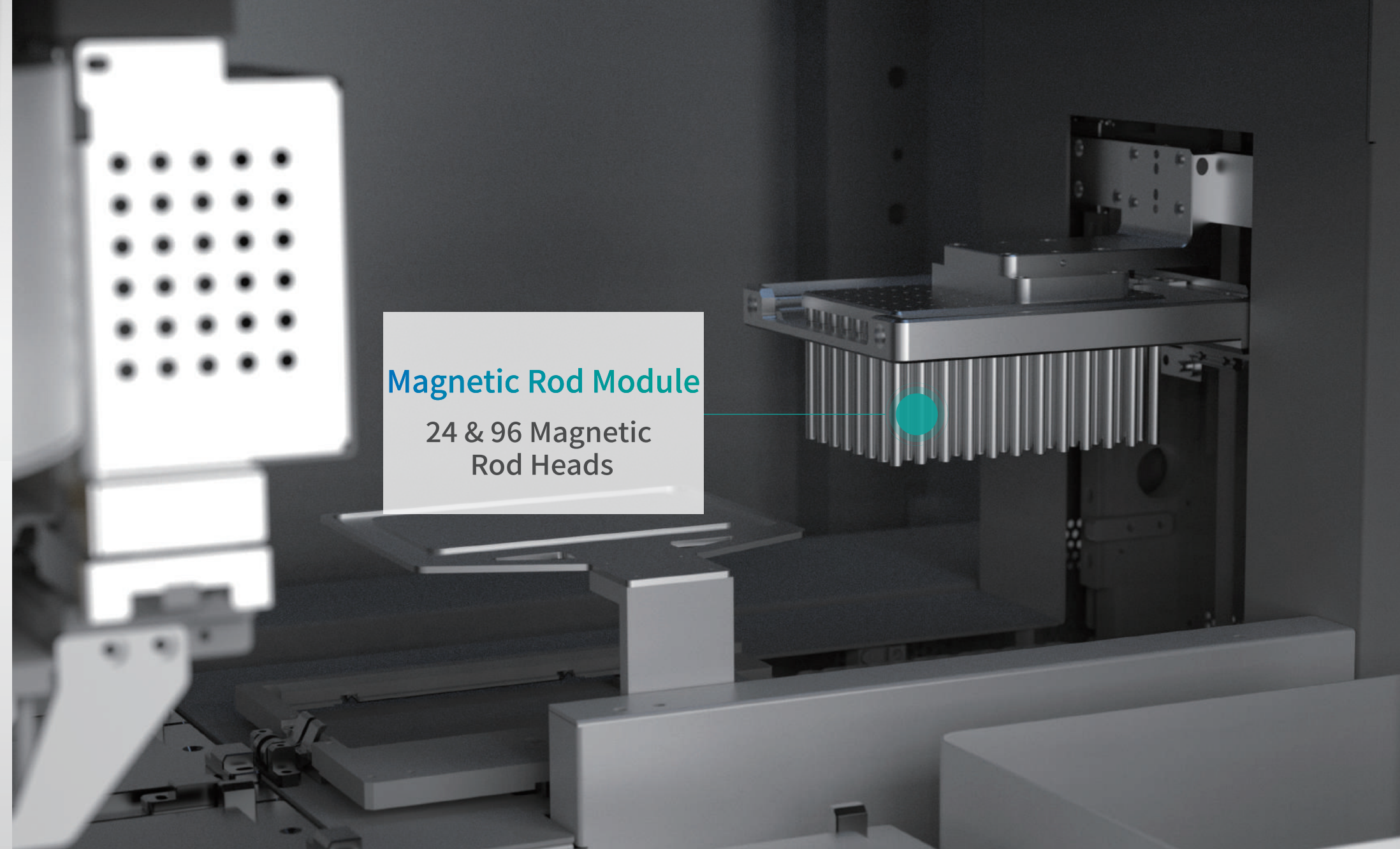
MGISP-NEX equips with interchangeable magnetic rod modules, it can meet the needs of different applicaiton scenarios.

- **Magnetic Rod Heads:** 24 or 96 magnetic rod heads;
- **24 Magnetic Rod Heads:** processing volume from 50  $\mu\text{L}$  to 5000  $\mu\text{L}$ ;
- **96 Magnetic Rod Heads:** processing volume from 20  $\mu\text{L}$  to 1000  $\mu\text{L}$ ;
- **Automatic Loading:** the magnetic rod automatically load the magnetic rod sleeve.



## Magnetic Rod Module

24 & 96 Magnetic Rod Heads

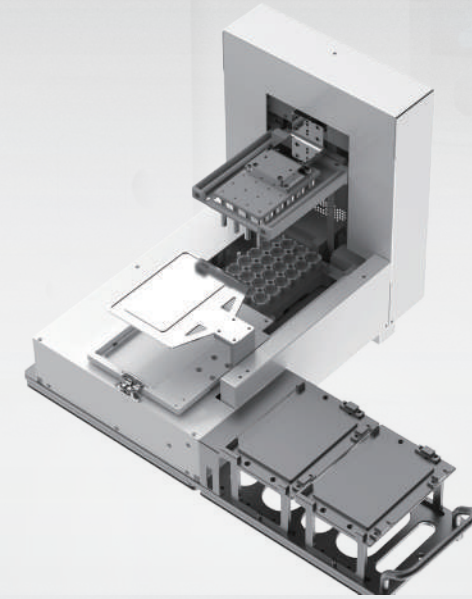




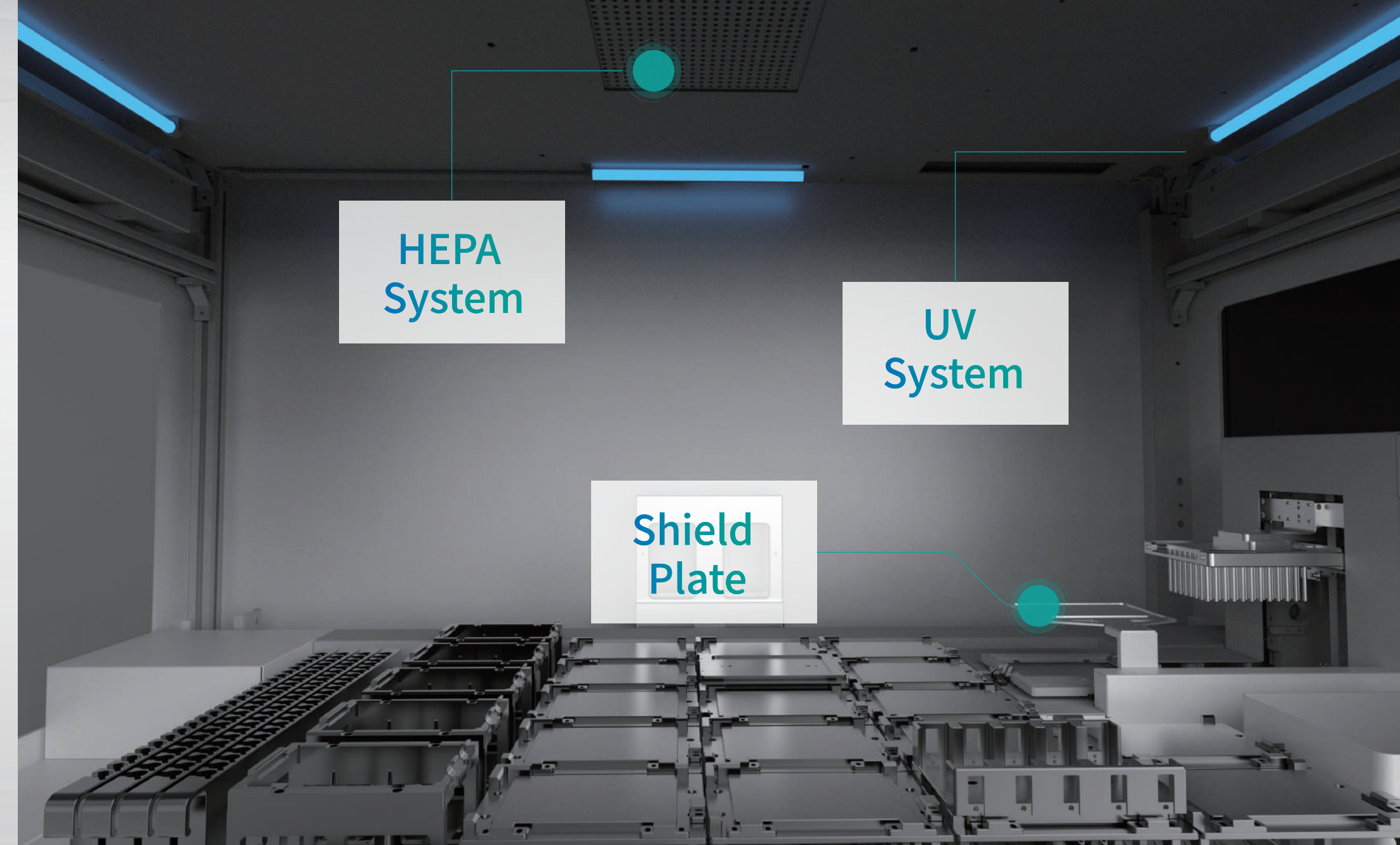
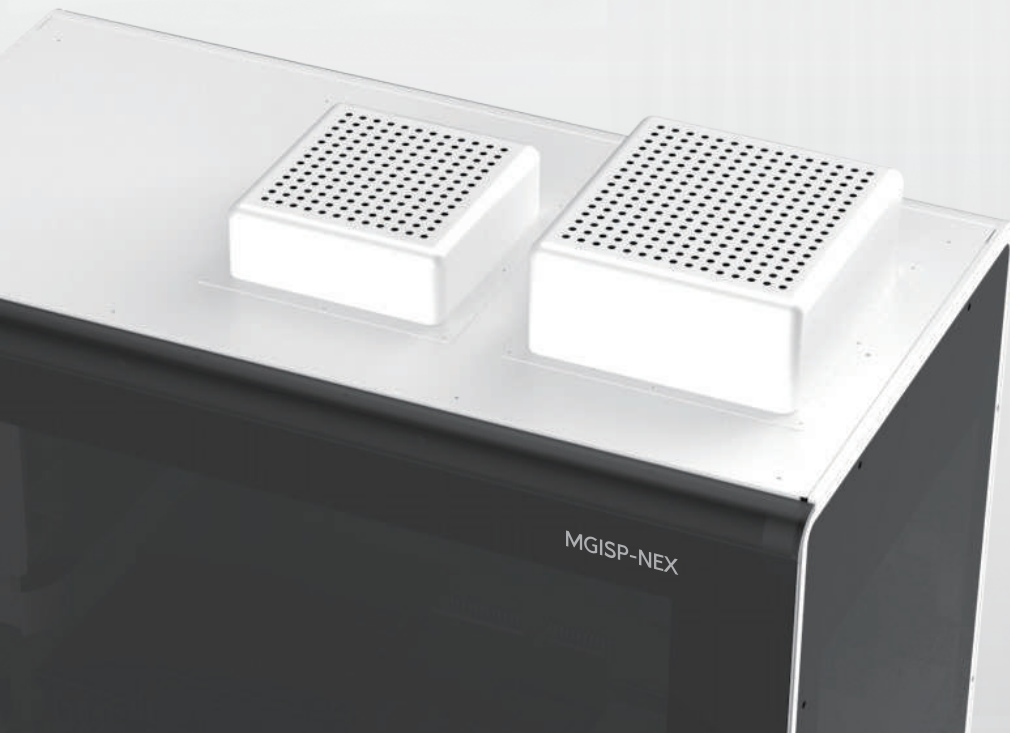
# Critical Contamination Control

Based on triple contamination control solutions

MGISP-NEX equips with UV system, HEPA system and shield plate, efficiently ensuring sample safety and reducing cross-contamination.



- **UV System:** the dose of irradiation is higher than 100,000  $\mu\text{W.s/cm}^2$ ;
- **HEPA System:** negative pressure filtration with an efficiency of 99.99%;
- **Shield Plate:** built-in shield plate, reducing cross-contamination.



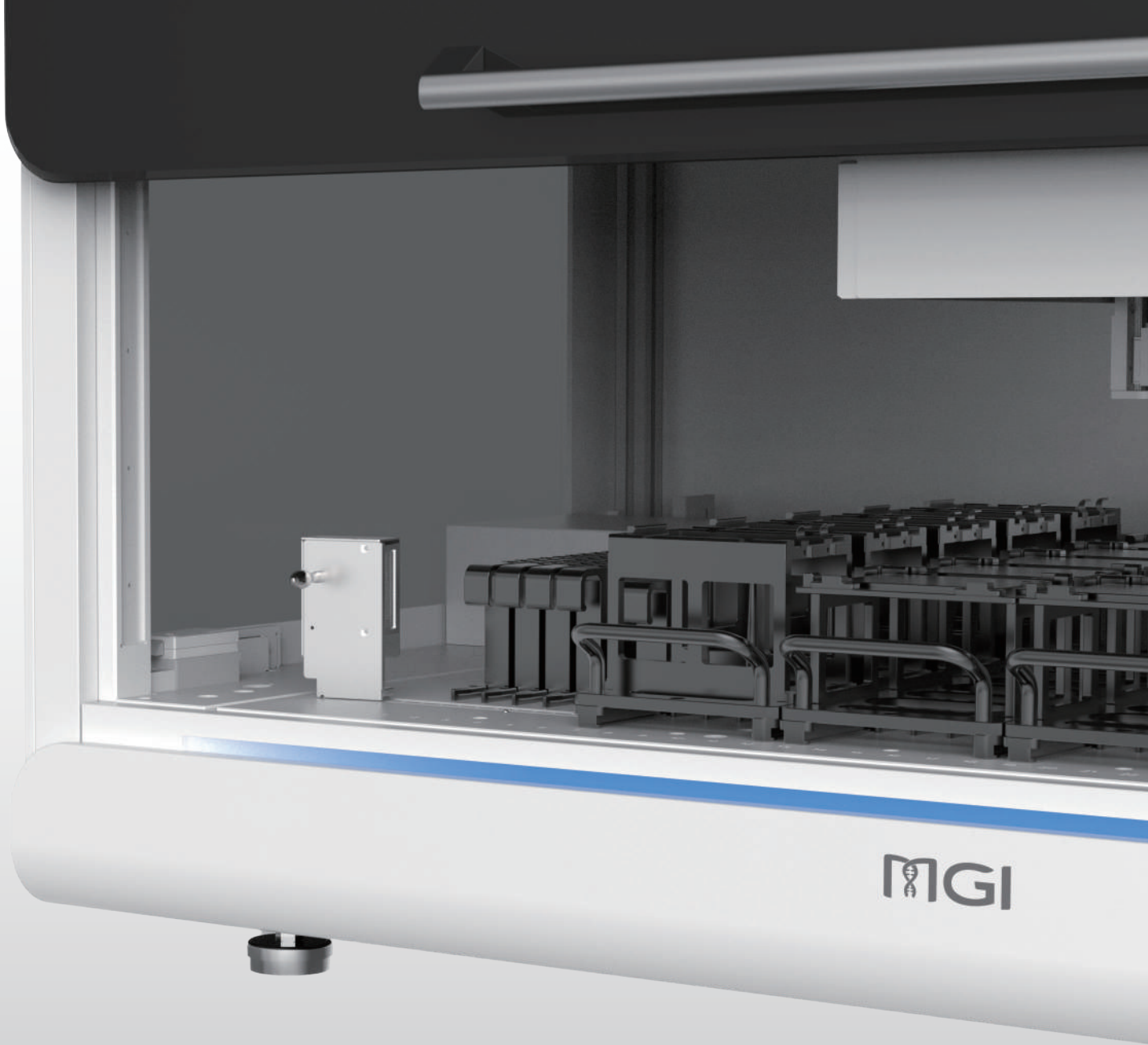


# Appendix

More about MGISP-NEX

▶▶▶ Hardware Parameters

▶▶▶ Ordering Information



Indicator	Parameter	
Independent 8-channel Pipettor	Pipetting range	1 μL-1000 μL
	Pipetting accuracy	1 μL-5 μL : CV<8%, accuracy<±10%;
		5 μL-50 μL : CV<2%, accuracy<±5%;
		50 μL-200 μL : CV<1%, accuracy<±2%;
		200 μL-1000 μL : CV<1%, accuracy<±2%;
		1000 μL : CV<1%, accuracy<±1%
96 Magnotic Rod Heads	Proccossing volume	20 μL-1000 μL
24 Magnotic Rod Heads	Proccossing volume	50 μL-5000 μL
Rod Heads	Magnetism	>4000 gauss
UV System	The dose of irradiation is higher than 100,000 μW.s/cm²	
Size	1410 mm (L) × 799 mm(W)(without door handle) × 970 mm (H)(without HEPA module)	
Weight	~232 kg (511 lb, without carriers)	
Table Loading Capacity	400 kg/m²	
Power	Supply voltage	200-240 V, 50/60 Hz
	Rated power consumption	1000 VA (without external electrical box) 1600 VA (with external electrical box)
Working Environment	Temperature	19°C-25°C
	Relative humidity	20%RH-80%RH, No condensation
	Air Pressure	80-106 kPa
Storage Environment	Relative humidity	15%RH~85%RH, No condensation
	Atmospheric pressure	80 kPa~106 kPa

Product Name	Item NO.	Version
Automated Nucleic Acid Extractor	900-000731-00	CE RUO
Automated Nucleic Acid Extractor	900-000732-00	CE IVD
24 Magnetic Rod Heads	510-003585-00	1 piece/box

Category	Item NO.	Product Name	Specification
Automatic conductive tips	091-000223-00	1000 μL tips, conductive, filtered, suspended	96 tips/rack, 40 racks/case
	091-000156-00	200 μL tips, conductive, filtered, suspended	96 tips/rack, 24 racks/case
	091-000159-00	50 μL tips, conductive, filtered, suspended	96 tips/rack, 24 racks/case
	091-000020-00	1000 μL black, conductive, sterile, filtered (Wide-Bore)	96 tips/rack, 16 racks/case
Automatic transparent tips	1000023970	1000 μL tips, transparent, filtered, suspended	96 tips/rack, 16 racks/case
	091-000158-00	200 μL tips, transparent, filtered, suspended	96 tips/rack, 24 racks/case
	091-000157-00	50 μL tips, transparent, filtered, suspended	96 tips/rack, 24 racks/case
Single well reservoirs	012-000780-00	50 mL single well reservoirs	50 pieces/box
	012-000779-00	100 mL single well reservoirs	50 pieces/box
96 well plates	091-000287-00	2.2mL 96-Well V bottom Deepwell Plate	10 plates/bag, 10bags/case
	1000025661	96 well tip comb	10 pieces/bag
24 well plates	091-000442-00	24 well square deep well plate 10 mL	5 plates/bag, 10 bags/case
	091-000441-00	24-10 mL well magnet set	2 plates/bag, 50 plates/case

# MGI Global Presence



Local technical support and Customer Experience Centers (CECs) have been established in multiple countries and regions worldwide to ensure timely and effective technical support and training.



Local warehouses and spare part centers have been established in multiple countries and regions worldwide to ensure the continuous availability of machine parts for maintenance.



Online technical support is available globally with a fully functional call center (Toll-Free Hotline 4000-688-114) accessible during workdays from 9:00 AM-12:00 PM and 13:00 PM-18:00 PM (Beijing time, GMT+8).



Providing installation services and system verification services as needed to ensure smooth implementation and operation. The value-added services are available for personalized services such as secondary relocation.



Responsible for any failure caused by non-human factors and non-force majeure factors within the warranty.



Providing instrument preventive maintenance services within the warranty period, along with a host of available extended warranty support plans to ensure optimal performance and reliability.

# About MGI Tech Co., Ltd.

MGI Tech Co., Ltd. (referred to as MGI) is committed to building core tools and technology to lead life science through intelligent innovation. With a focus on R&D, production and sales of DNA sequencing instruments, reagents, and related products, MGI provides real-time, panoramic, and life course equipment and systems for precision medicine, precision agriculture, precision healthcare and other relevant industries. MGI is a leading producer of clinical high-throughput gene sequencers, and its multi-omics platforms include genetic sequencing, medical imaging, and laboratory automation.

As of June 30, 2023, MGI has more than 2,800 employees, and 35.2% of whom are R&D personnel. Founded in 2016, MGI operates in more than 90 countries and regions, serving more than 2,400 customers. It has established scientific research and production bases, global training and service network in many countries and regions around the world. MGI is one of the few companies in the world that can independently develop and mass-produce low-, medium- and high-throughput clinical gene sequencers from GB to TB. Providing real-time, comprehensive, life course solutions, its vision is to lead life science innovation.



2,800+

Employees

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Customers

35.2%

R & D Personnel

90+

Countries & Regions