

Performance Parameters >>

Parameter	Performance
Model	MDR-HS1000-8B
Function	Nucleic acid extraction +2x96 PCR reaction set-up
Sample Process	Add sample and reagent, mix, incubate, magnetic suction, waste disposal
Extraction Method	Magnetic beads extraction method
Running Time	96 samples, full process < 60 mins, extraction < 45mins
Channels	4 independent channels + 8 joint channels
Refridgeration Module	Adjustable 0~10°C
Sample Throughput	1-96 samples
Sample Type	Free cells, oropharyngeal swab, whole blood, blood plasma, blood serum, urine, reproductive tract discharge
Tube Type	Compatible with vacutainers, centrifuge tubes, cryopreservation tubes and more
Volume Capacity	5~1000μL
Liquid Processing	Single-use pipette tips with filter, liquid level detection, clot detection
Liquid Precision	CV<5% for handling 10μL of liquid and above
Heating Module	Contact heating, incubation temperature ~100°C
Mixing Method	Vortex mixing
Mixing Intensity	1~20 levels
Anti-contamination	Air exhaust system, UV light, desinated route for liquid handling
Safety Measures	Gripper detection, suction detection
BarCode Scanning	Supports sample scanning and auto-numbering, 2/5 Interleaved, Code39, Code128, ENA/UPC, EAN Addendun, Codebar, pharma Code, Code93 and more
Ports	USB, LIS system, can connect to conventional PCR machines
Interaction Interface	Coloured touch screen
Program Management	>20000 programs, freely edit experimental project and paramters
Operation Condition	Temperature: 15-35°C Humidity: 15-85%
Power Supply	220V~240V, 50/60Hz
Size	1300mm * 700mm * 800mm



Automated Workflow Series  
MDR-HS1000-8B  
Automated Nucleic Acid Extraction System

## Automated Nucleic Acid Work Station Series

The automated nucleic acid work station is specially designed for molecular diagnostics. This machine consists of sample racks, reagent storage, pipette tip storage, mechanical arm pipette, mechanical arm rack-mover, vortex module, temperature control module, barcode scanning module, a running system, system protection and transport system. The simple operation system enables standardization of work flow, greatly minimizing human operational error, improving accuracy and reliability of testing results, providing an easy, automated, high-precision systematic lab perfecting solution.

### Product Advantages >>

#### A fully automated platform

- ◇ Fully automated operation in one-click
- ◇ Batch processing to avoid human errors that might affect experiment
- ◇ Completes all preparation for PCR reaction
- ◇ Different types of sample channels to fulfil different needs

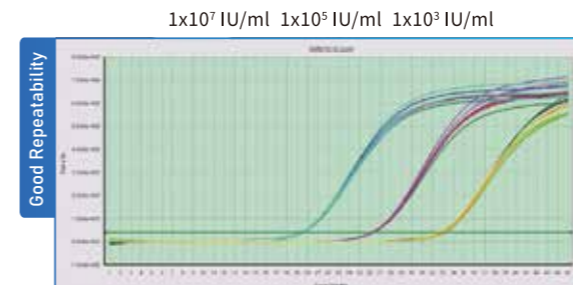
#### High-throughput Extraction

- ◇ Able to complete nucleic acid extraction and PCR reaction set-up for 48/96 sample in a single run
- ◇ 1 experiment uses 1 deep well plate, saving consumables
- ◇ Distribute reagent according to sample size, avoiding wastage

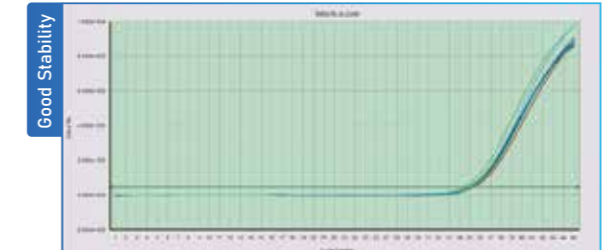
#### Safe from Contamination

- ◇ Single-use consumables, eliminate well contamination and batch contamination
- ◇ Fully contained environment to effectively protect operators
- ◇ Reasonable module allocation with specific route of liquid dispensing
- ◇ UV light timer, reducing the risk of cross-batch contamination
- ◇ Air exhaust system prevents aerosol contamination

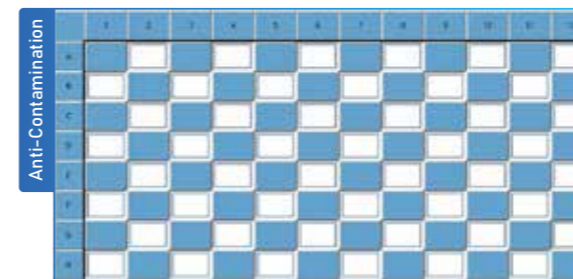
### Instrument Performance >>



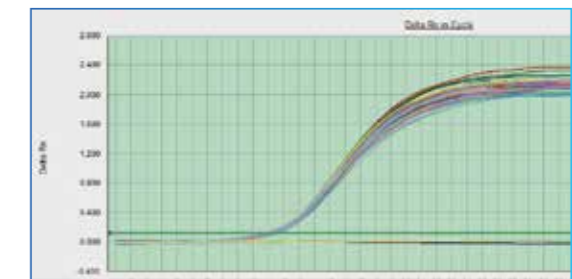
Samples of 3 concentrations were repeatedly extracted 8 times, the average CV is <math>\leq 3\%</math>



There is a 100% detection rate for samples with concentration 400copies/mL after 20 repeated extractions



Strong positive samples (blue box) and negative samples (white box) are arranged in a checkerboard manner. Results show that there is no amplification in all white boxes, meaning there is no contamination.



### Applicable Scenario >>

