

## Automatic Urinalysis System

### FUS-100 Specification and Technical Parameter

Item	RBC, WBC, WBCC, SQEP, NSE, HYAL, UNCC, BACT, SPRM, MUCS, UNCX, YST
Throughput	60 samples/h
Sample Volume	Minimum volume: 3mL non-centrifuge urine (Integrated system minimum volume: 5mL non-centrifuge urine); aspiration volume: about 1mL
Test Principle	Flow cytometry; High-speed, High-depth of Field Imaging Technique
Formed Element Identification	Artificial intelligence identification technique
Workstation	Quad-core processor, Windows operating system, Bidirectional to LIS/HIS.
Data Storage	Storage capacity $\geq$ 10,000
Connecting	Available for connecting with DIRUI H-800 Automatic Urine Analyzer. Combined result printing.
Printer	Hp laser printer

### H-800 Specification and Technical Parameter

Item	Urobilinogen, Bilirubin, Ketones, Blood, Protein, Nitrite, Leukocyte, Glucose, PH, Vitamin C, Microalbumin, Creatinine, Ca, Specific gravity, Color, Turbidity
Wavelength	525nm, 572nm, 610nm, 660nm
Throughput	240 samples/h
Auto loader Capacity	50 samples/270 samples optional
Strips	H14-Ca(H-800), H13-Cr(H-800), H12-800MA, H11-800MA, H10-800, H11-800
Data Memory	Routine results 10000, emergency results 5000. QC results 1000
Data Communication	RS-232 port, parallel printing port
Display	5.7 inch LCD
Language	English
Power Supply	AC110~220V 50Hz/60Hz
Power	300VA
Dimension	1537.5×892.7×580(H-800 with auto loader-expansion kit)
Weight	55.7kg
Printer	Built-in thermal printer

Alone we're good Together we're great



Automatic Urinalysis System  
(FUS-100 integrates H-800)



CE

Certified to  
ISO 9001:2008 and ISO 13485:2003

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DIRUI

DIRUI

## Automatic Urinalysis System



With 20 years experience in urinalysis product development

Adopting the most advanced image capture and multi-core parallel processing technology

Following H-800 Automatic Urine Analyzer

Another advanced product in urine analysis is produced by DIRUI—FUS-100 Urine Sediment Analyzer

An unmatched Urinalysis System is formed by connecting with H-800

# FUS-100

Urine Sediment Analyzer



- Identify and classify by utilizing digital imaging technology, consistent with CLSI standards
- 810 frames of images for each sample
- Flow cytometry technology, without centrifugation and staining, contributes to cost-effective
- 12 categories of formed elements in urine can be identified accurately

## Test Principle



### ✓ Flow cytometry

Utilizing flat flow cytometry, the sample passes through the system encapsulated within a layer sheath fluid. The sheath flow technique ensures: 1. The sample is located at the ideal focal range of the microscope lens. 2. The sample is maintained as a single cell layer during the imaging process, ensuring there is no loss of data or inaccurate results due to cell overlap. 3. The sheath flow allows for sediment diffusion, effectively preventing formed element aggregation and further improving the formed element identification process.

### ✓ High-speed, High-depth of Field Imaging Technique

Microscope imaging is illuminated by a high-speed flashing bulb (40 flashes per second). Illuminated sample images are captured by a high-definition CCD camera. 810 images of each sample are captured and analyzed by the sediment identification software.

### ✓ Artificial Intelligence Identification Technique

Images of formed elements are processed by Dirui's intelligent identification software. Once identified, element images are extracted and classified according to shape, texture, size, statistic, and frequency domain. Upon completion of identification the real images from the actual sample are provided to the user through an easy-to-use software interface. Real images for real results.

