



## Urinalysis Hybrid System U3601

3 in 1 design, accurate and excellent

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### Urinalysis

# U3601 Urinalysis Hybrid System

The U3601 is a cutting-edge machine that seamlessly combines urine physical analysis, chemistry analysis, and sediment analysis. It is designed to elevate your urine testing processes, offering 16 chemistry analysis parameters, 32 sediment analysis parameters, and 5 physical analysis parameters. Utilizing laminar flow imaging, high-speed photography, and medical image recognition technology, the U3601 provides high-resolution images and accurate classification of urine particles.

## 3 in 1 design, accurate and excellent



### Advanced Technology

- Laminar flow technology
- High-speed photograph technology
- Medical image recognition
- Photoelectric colorimetry method bring you more accurate results by detecting full spectrum



### Accurate Recognition

- No overlap, gather or morphology changes of formed particles
- High-definition images provide a clear view of particles
- Powerful clinical database



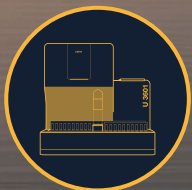
### Convenient Operation

- Without centrifugation, staining or rotation of lens
- The images can be reviewed and decrease microscopy rate
- Priority for emergency sample



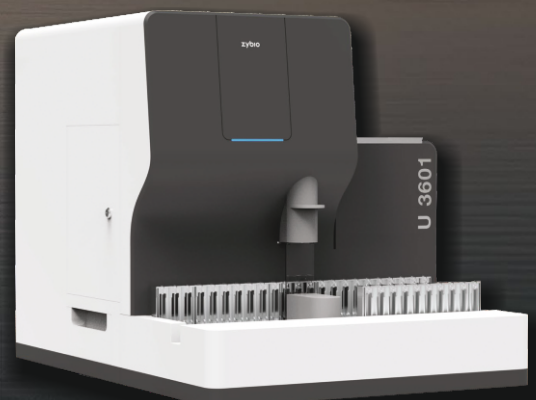
### Improved Productivity

- 240 T/H for Chemistry Mode
- 120 T/H for Formed Particles Mode/Hybrid Mode
- Automatic strip feeder with a capacity of 400 strips
- Physical analysis of urine includes Color, SG, Turbidity, Conductivity and Osmolality



### Compact Design

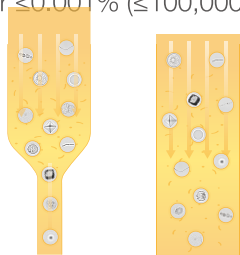
- Integration of physical, chemical and morphology analysis
- Small footprint for space saving



## Advanced Technology

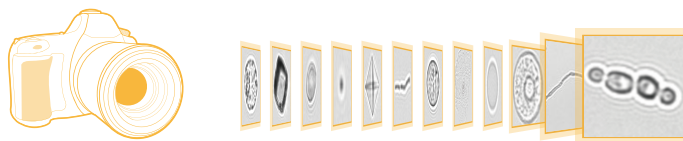
### Laminar Flow Technology

- Avoid overlap/gathering/break of particles
- No centrifugation or staining required
- Carryover  $<0.001\%$  ( $\leq 100,000$  / $\mu\text{L}$ )



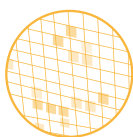
### High-speed Photography Technology

- High-resolution images prevent trailing and blurring
- Over 3000 images are captured with 40X objective lens
- Reviewable image minimize microscopy rate



### Intelligent Image Recognition

- Powerful clinical database
- Accurately extract image feature info
- Up to 25 automated classifications



RBC



CAST



WBC



CRYSTAL



Auto-classify  $\geq 25$  urine formed particles

## Comprehensive Parameters

### Chemistry Parameters

URO, BIL, KET, LEU, NIT, PRO, BLD, GLU, SG, pH, VC, MALB, CRE, Ca, ACR, PCR

### Sediment Auto-classifications

RBC, WBC, PHCY, WBCC, SQEP, NSE, HYAL, UNCC, COM, COD, URIC, AUCR, MAPH, CAPH, TYRO, UNCX, BACI, SUCC, BYST, HYST, SPRM, MUCC, FAT, AMOR, UNCL

### Physical Parameters

Color, Specific Gravity, Turbidity, Conductivity, Osmolality

Additionally, U3601 provides 7 RBC phase parameters (RUO) and 4 RBC phase graphs, enabling rapid and precise identification of the source of hematuria.

## Efficient Detection

### Limitation of visual & semi-automatic method

- Unable to precisely control reaction time and reaction volume
- Subjective color judgment is involved
- Lack of QC & CAL

### Limitation of manual microscopy method

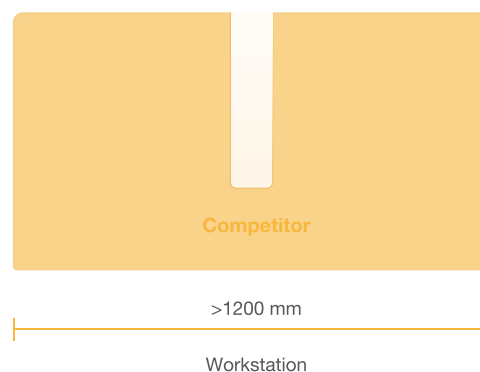
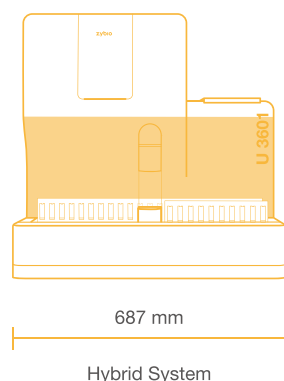
- Manual operation, subjective interpretation, no standardization
- Time-consuming, limited throughput
- Experienced staff required, inconsistent quality

### Automatic machine used for urinalysis

- Standardization, minimizing human error and subjective interpretation
- Efficiency, automatic sample procession and detection, reducing TAT time
- Traceability, systems can store and analyze results, improving workflow and traceability

## Compact Design Combined With More Detection Modes

- Save about 50% space
- Integrated urinalysis solution



## Technical Parameters

Principle	Dry chemistry analysis: photoelectric colorimetry, full spectrum
	Sediment analysis: laminar flow imaging technology
	Physical analysis: RGB photodetectors, scattering method, refractometry, electrode method
Throughput	240 T/H for chemistry mode
	120 T/H for sediment mode/hybrid mode
Test Items	Dry chemistry analysis: URO, BIL, KET, LEU, NIT, PRO, BLD, mALB, CRE, GLU, SG, pH, Vc, Ca; ACR, PCR
	Sediment analysis: 25 automated classifications, 7 RUO parameters
	Physical analysis: color, specific gravity, turbidity, conductivity and osmolality
Test strip capacity	400
Sample Position	60 samples/290 samples (when connecting pre-storage tray, recycle tray and connection bridge)
Sample volume	Minimum sample volume: 2mL non-centrifuged urine
	Aspiration volume: about 1.5mL
Test mode	Auto loader mode, STAT mode
Operation environment	Temperature: 10~30°C
	Humidity: < 80%
	Atmospheric Pressure: (70~106) kPa
Power	100~240 V, 50/60 Hz, 150 VA
Dimension (mm)	512 (W) × 687 (D) × 530 (H)
Weight (kg)	55

