

## **AUTOMATED URINALYSIS SYSTEM**

## **UriSed Cascade**



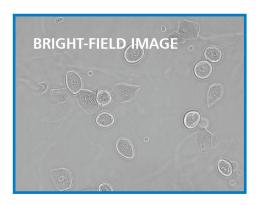
# HIGHER THROUGHPUT / IMPROVED EFFICIENCY

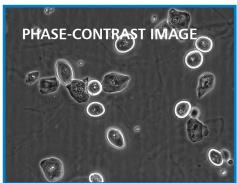
- Combines two UriSed 3 PRO instruments and one LabUMat 2 instrument:
   Chemistry and sediment analysis in one system
- / Throughput: up to 200 tests/hour
- / Walk-away operation
- / Revolutionary particle visualization and recognition utilizing both bright-field and phase-contrast microscopy
- / Zoomable HPF-like images
- / Dual-view for both bright-field and phase-contrast images
- / Fully automated sample preparation requiring only low sample volume
- / Manual microscopy mode: Real-time view of any viewfield of the cuvette to see moving microorganisms as well
- / No need for liquid reagents or calibrators
- / Automated QC analysis and maintenance procedures
- / Streamlined documentation by LIS connectivity

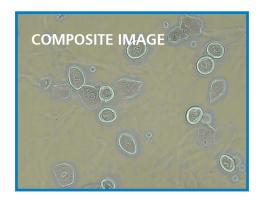


UriSed Cascade is an automated urinalysis system for hospitals and laboratories processing up to 200 urine samples per hour, providing reliable urine chemistry and urine sediment results in an instant. The system offers uniquely advanced visualization and recognition of formed elements in urine sample using a special combination of bright-field and phase-contrast microscopy by automating the standard gold method sediment analysis. It improves differentiation of hyaline casts, red blood cells, crystals, yeast and overall diagnostic performance in central screening laboratories as well as in specialist laboratories.

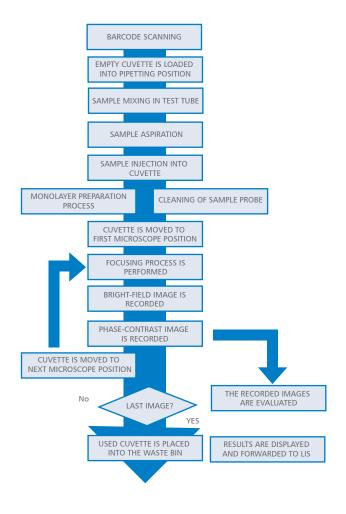
## URINE PARTICLES WITH OUTSTANDING **DEFINITION AND CLARITY**







### PATENTED MEASUREMENT PROCESS



## **TECHNICAL SPECIFICATIONS**

Auto-detected particle classes:  Further classes for ma	Red Blood Cells (RBC); White Blood Cells (WBC); WBC Clumps (WBCc); Hyaline Casts (HYA); Pathological Casts (PAT); Squamous Epithelial Cells (EPI); Non-Squamous Epithelial Cells (NEC); Bacteria Cocci (BACc); Bacteria Rods (BACr); Yeast (YEA); Mucus (MUC); Amorphous material (AMO); Sperm (SPRM); Crystals (CRY): Calcium-oxalate monohydrate (CaOxm), Calcium-oxalate dihydrate (CaOxd), Uric acid (URI), Triple phosphate (TRI), RBC ghost and RBC-Aca flags. nual sub-classification are also available
Other evaluated parai	meters: Bilirubin, Urobilinogen, Ketones, Ascorbic acid, Glucose, Protein, Blood, pH, Nitrite, Leucocytes via LabStrip U11 Plus (GL) urine test strip Specific gravity, Color, Turbidity via PMC (Physical Measurement Cell) module
Technology:	Cuvette based automated microscopy and image processing / Reflectance photometry
Throughput:	Up to 200 tests/hour
Magnification:	Zoomable HPF-like images
Displayed images:	Phase-contrast, bright-field and composite
Min. sample volume:	2.0 ml (checked by liquid level sensor)
Barcode reader:	Built-in
Printer:	Optional, external (connected to operating PC)
Interfaces:	USB, LAN, RS232 serial port
LIS connectivity:	LIS2-A2 or HL7
Consumables:	LabStrip U11 Plus GL test strip/ UriSed cuvette
Consumable traceability:	RFID tag, RFID based rack identification

The operation of the urinalysis system is based on the patented UriSed Technology. Working without any special liquid reagents, UriSed Cascade performs sample preparation, produces whole viewfield microscopic images and evaluates them using the Artificial Intelligence-based Evaluation Module (AIEM), a high-quality image processing software.

Using the phase-contrast technology UriSed Cascade provides improved performance. It has outstanding visualization and recognition capabilities for every particle type even the ones that  $\mathbb{S}$ conventional bright-field microscopy cannot easily detect (such as casts and ghost red blood cells).

