

# Automating the gold standard in urine sediment



The Urilyzer<sup>®</sup> Sed automates the gold standard in measuring and describing formed elements in urine – the microscopy. The instrument is a precise and accurate analyzer which classifies particles from native urine with microscopy technology and an automated image recognition software.

The system is an affordable solution for hospitals, laboratories and clinics. It streamlines the workflow, helps to standardize the procedure and increases the efficiency of the user.

#### Efficient and affordable

- High throughput of up to 120 samples per hour due to pre-scanning of samples. Negative samples are not analyzed in high power field.
- Intelligent and solid design provides maximum value at low running costs.
- Uses only one major system liquid (Cleanser A). All reagents are space- and weight efficient concentrated solutions.
- Long-lifetime counting chamber reduces the running costs of the system to a minimum.





The sample needle is washed automatically after each test.



Throughput: up to 120 samples per hour. The sample volume is 2.0 ml.



Microscopic measurement within the counting chamber (3 separate channels).



#### **Reliable and accurate**

- Up to 200,000 results, including all microscopic images are stored in the database.
- Full quality control management system including Levey-Jennings charts.
- Automated focusing ensures sharp images.
- The use of native, non-centrifuged urine samples ensures that no particles are missing or damaged due to centrifugation.
- Images are captured by a CCD camera and particles are automatically recognized, classified and counted by the intelligent software based on a morphological analysis.
- Each of the three channels is provided with a separate needle.

## Easy-to-use and agile

- The Urilyzer<sup>®</sup> Sed aspirates the native urine, fills one of three counting channels and automatically screens the sample.
- Real whole-field images are captured in low- and high power scan and are available for on-screen verification.
- Easy-to-use user interface on a PC monitor.
- Urine chemistry results and sediment results can be stored in a integrated report.
- The microscopy results are also stored as high quality images which eliminates the need of repeating measurements.











All whole-field images are shown on a PC monitor and can be enlarged for full-screen view.



### **Technical specifications**

Measurement principle	Automatic mixing and sampling followed by an auto-identification of particles based on a morphologic analysis			
Measurement type	Microscopic measurement of native urine samples in a counting chamber (3 separate channels) in low (LP 10x) and high power (HP 40x)			
Auto-classified particles	Normal red blood cells, Abnormal red blood cells, White blood cells, Casts, Epithelical cells, Yeast, Crystals, Mucus and Bacteria (sub-classification by user)			
Microscopic data	Objective lens10x / 40xPrecision3.2 µm (horizontal), 0.25 µm (vertical)Visual field4 mm x 25 mmLight source12 V, 20 W			
RBC analysis (R&D parameters)	In addition to the classic auto-identification of the RBC's, the Urilyzer Sed offers additional information in form of diagrams about the size, form and chroma			
Default no. of images	10 for LP and HP if less than 200 particles are identified in the screening, otherwise 6 in LP and HP			
Throughput	up to 120 samples per hour			
Detection rate	$\geq$ 98% at a concentration level of 5 cells/µl			
Sample volume	2.0 ml native, non-centrifuged urine (500 µl test volume)			
STAT	Independent STAT sample position			
Sample identification	Built-in barcode reader			
Display	External monitor (included)			
Printer	External laser printer (included)			
Memory	200,000 patient results including all microscope images			
Interfacing capabilities	RS232 and Ethernet			
Size (WxDxH)	640 x 680 x 530 mm			
Weight	58 kg			
Power	100–240V~ 50/60Hz 450VA			

#### Consumables

System Solutions	ArtNo.	Pack Size
Cleanser A	ULS2100	500 ml concentrate for 5 L
Cleanser B	ULS2200	4 x 40 ml concentrate for 400 ml each
Maintenance Cleanser	ULS2300	4 x 40 ml concentrate for 400 ml each

Quality control	ArtNo.	Pack Size
Urilyzer <sup>®</sup> Sed Control Set	ULS3100	28 x 10 ml (3 Level: 14 x High, 7 x Low, 7 x Sensitivity Level)

Can be combined with the Urilyzer<sup>®</sup> Auto to the fully automated urine work station **Urilyzer<sup>®</sup> Duo**:







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