

LabUMat 2

- Up to 240 tests/hour throughput
- Spotting method: sample dosage by pipetting unit
- Cost-effective operation without any special liquid reagents
- Low sample volume; liquid level detection
- Advanced, patented detection technique
- Separate PMC module for measuring physical parameters
- User friendly and flexible software; easy operation via color touch screen
- Streamlined documentation by LIS connectivity
- Automated QC analysis and self-check
- Software and language upgrades via USB stick



Proficiency and efficiency in urinalysis

The LabUMat 2 is a fully automated urine chemistry analyzer evaluating 10 chemical parameters of LabStrip U11 Plus GL test strips and 3 physical parameters. Besides preserving all its former attractive features, the new version of LabUMat has been significantly improved for an even better performance. Continuing its predecessor's mission, LabUMat 2 is a high quality and reliable instrument meeting the requirements of modern automated laboratories and providing walk-away operation. Easy operation via touch screen, automatic handling of test strips and test tubes – including sample mixing and precise dosing for each test pad by the pipetting unit –, an advanced detection technique and intelligent data management provide maximum efficiency while making urinalysis simple.

Technical features

Methodology:	reflectance photometer, 4 discrete wavelengths
Evaluated parameters:	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
Max. throughput:	up to 240 tests / hour
Batch size:	100 test tubes
Min. sample volume:	2.0 ml (checked by liquid level sensor)
Memory:	max 10,000 results
Display:	800x600 TFT
Size:	600x650x635 mm (LxDxH)
Weight:	55 kg
Input:	100-250V AC / 50-60 Hz
Power consumption:	max 200 W
Interfaces:	USB, RS232 serial port, PS2, VGA
Printer:	built-in thermal printer
Barcode reader:	built-in barcode reader

About 77 Elektronika

77 Elektronika Kft. is a major global developer, manufacturer and supplier of in vitro diagnostic medical devices, mainly urine analyzers, rapid test readers, blood glucose meters and their consumables. The products are supplied throughout the world under the 77 Elektronika brand and as OEM products for market-leading multinational companies. 77 Elektronika was established in 1986 and is headquartered in Budapest, Hungary (EU). The company is committed to providing superior products and services to the complete satisfaction of its customers.

- Up to 120 tests/hour throughput
- Fully automated sample preparation
- Whole viewfield microscopic images of sediment
- Automatic sample identification and classification of urine particles
- Subclasses can also be detected manually
- Manual microscopy mode: Real-time view of any viewfield of the cuvette to see moving microorganisms as well
- Automated QC analysis and self-check
- Low sample volume
- Cost-effective operation without any special liquid reagents
- User friendly and flexible software which can be updated via USB stick
- Streamlined documentation by LIS connectivity



UriSed 2

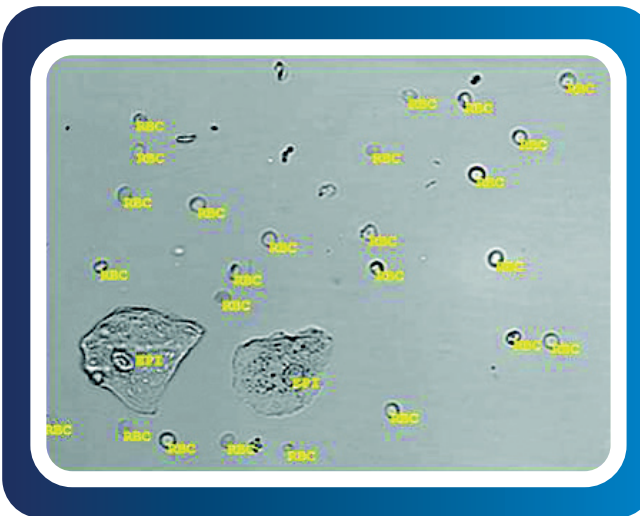
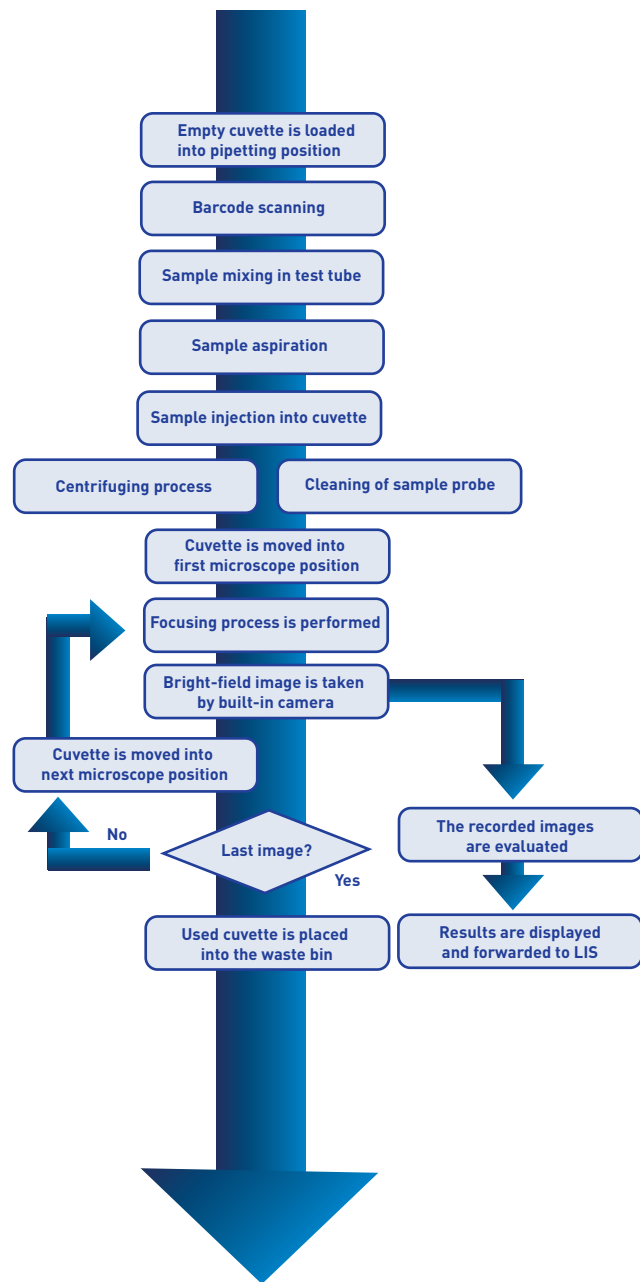
The Full Picture in Urinalysis

The UriSed 2 is a fully automated sediment analyzer providing whole viewfield microscopic images of urine sediment and detecting 16 sediment particles using UriSed Cuvettes. This instrument belongs to the "Facelift" generation of the UriSed technology. Its operation is based on the same patented measurement technique, which is the automation of traditional manual microscopy. UriSed 2 performs sample preparation, takes bright-field images of each sample through its built-in microscope and evaluates them using the AIEM (Auto Image Evaluation Module) which is high quality image processing software. Like its former model, UriSed 2 offers a reliable and standardized method for urine sedimentation.

The UriSed 2 microscopic urine sediment analyzer is a stand-alone instrument which can be connected to the LabUMat 2 urine strip reader. Together, the two instruments make a Complete Urine Laboratory System.



Patented measurement process



Highlights of UriSed 2

- UriSed 2 has a reproducible method for the preparation and evaluation of urine samples, which is based on the automation of traditional manual process.
- As each sample is observed in a separate chamber (cuvette), there is no carry over between different samples.
- UriSed 2 does not need any special reagent material for the operation; cuvettes are the only consumables.
- UriSed 2 provides whole viewfield images – like HPF images in routine manual microscopy – in a fully automated way.
- Images are evaluated automatically and reliably.
- These high quality clear and sharp images are stored in a database; in that way human evaluation is also possible at any time after the measurement on screen without manual microscopic investigation.
- UriSed 2 can be used to educate laboratory staff since images can be seen on full screen.

Technical Specifications

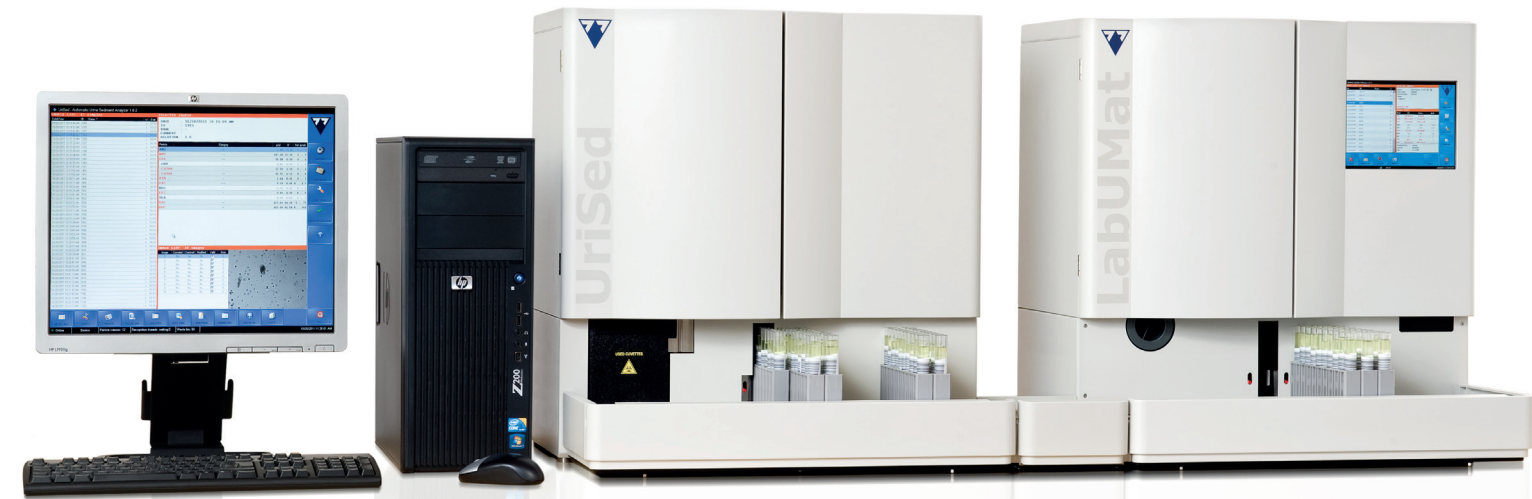
Detected particle classes:	RBC (red blood cells); WBC (white blood cells and wbc clumps); HYA (hyaline casts); PAT (pathological casts); EPI (squamous epithelial cells); NEC (non-squamous epithelial cells); BACc (bacteria cocci); BACr (bacteria rods) YEA (yeas CRY (crystals): CaOxm (calcium-oxalate monohydrate), CaOxd (calcium-oxalate dihydrate), URI (uric acid), TRI (triple phosphate); MUC (mucus); SPRM (sperm);
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Further classes for manual subclassification are also available!

Memory:	max 10,000 results (including all images)
Throughput:	up to 120 samples/hour
Magnification:	standard, HPF-like images
Min. sample volume:	2.0 ml (checked by liquid level sensor)
Batch size:	100 test tubes
Barcode reader:	Built-in
Printer:	optional, external (connected to operating PC)
Interfaces:	USB, RS232 serial port
Size:	600x640x635 mm (LxDxH, without operating PC)
Weight:	63 kg (without operating PC)
Power (measuring unit):	100-250V AC / 50-60 Hz / max. 200 W
Power (operating PC):	100-127V AC / 47-63 Hz / max. 400 W 220-240V AC / 47-63 Hz / max. 400 W

LabUMat 2 & UriSed 2

Complete Urine Laboratory System



Chemistry and sediment analysis in one system

The efficiency of LabUMat 2 test strip analyzer and UriSed 2 microscopic sediment analyzer – both manufactured by 77 Elektronika – can be maximized by using the two instruments together as one system.

Common operation is enabled with physical and software connections between LabUMat 2 and UriSed 2. The results of both measurements are stored in a common database and reported as a common report.

Since all necessary measurements which have to be done on urine samples are completed by this integrated system in one process, the combination of LabUMat 2 and UriSed 2 accelerates laboratory throughput and provides the most effective and reliable solution for complete and professional urine analysis.

All you need for complete urine analysis



LabStripU11 Plus GL test strips for LabUMat 2 (closed system)

Cuvettes for UriSed 2 (closed system)

Normal distilled water

Standard test tubes