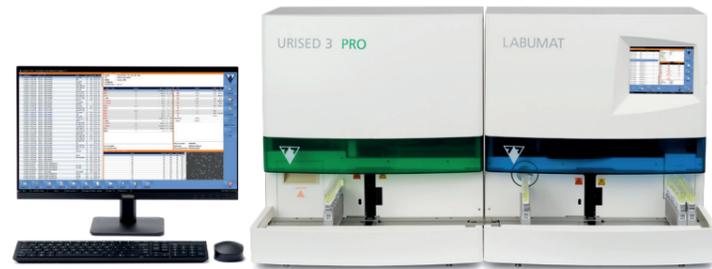## LabUMat 2 & UriSed 3 PRO
The Automated Urine Laboratory System

Urine chemistry and sediment analysis in one system: up to 150 tests per hour

The LabUMat 2 urine chemistry analyzer and UriSed 3 PRO microscopic urine sediment analyzer connected together enable laboratories to have a completely automated urinalysis system. The integrated solution accelerates the laboratory throughput and provides an effective and reliable solution for urine analysis. The system handles the sample forwarding, sample preparation, measurement process, sample analysis, reporting and result review with the microscopic images. The results of urine chemistry and sediment analysis are stored in a unified database.

The new pediatric mode is available both for LabUMat 2 and UriSed 3 PRO, enabling the chemical or sediment measurement of 1 mL sample, that can be further reduced to 0.8 mL with pediatric tubes for each instrument. In case of the connected system in pediatric mode only 1.25 mL sample is needed to carry out the measurement, that sample volume can be further reduced to 1 mL with pediatric tubes.

Higher throughput with the Cascade configuration: up to 200 tests per hour

The UriSed Cascade configuration enables the use of two UriSed 3 PRO devices with the LabUMat 2 thereby providing an ideal solution for high-throughput laboratories with up to 200 tests/hour.

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 worldwide 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 premium products and services to the complete satisfaction of its customers.

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77 ELEKTRONIKA

URISED 3 PRO - LABUMAT 2

URISED®
TECHNOLOGY

See the Full Picture in Urinalysis
with Gold Standard Precision

URISED 3 PRO

Features & functions

- Revolutionary optical system combining bright-field and phase contrast microscopy
- The only consumable is the UriSed cuvette
- No need for liquid reagents or calibrators
- Throughput: up to 150 tests/hour
- Dual-view for both bright-field and phase contrast images
- Zoomable HPF-like images
- Improved consumable traceability: RFID based cuvette and rack identification

- Fully automated sample preparation requiring only low sample volume
- Live view mode: Real-time view of any viewfield of the cuvette to observe microorganisms in motion
- Automated QC analysis and maintenance procedures
- UriSed 3 PRO and LabUMat 2 together make a Complete Urine Laboratory System
- Streamlined documentation by LIS connectivity

Automated Urine Sediment Analyzer

URISED® TECHNOLOGY

Detected particle classes:

RBC (Red Blood Cells) ; **WBC** (White Blood Cells); **WBCc** (WBC Clumps); **HYA** (Hyaline Casts); **PAT** (Pathological Casts); **EPI** (Squamous Epithelial Cells); **NEC** (Non-Squamous Epithelial Cells); **BACc** (Bacteria Cocci); **BACr** (Bacteria Rods); **YEA** (Yeast); **MUC** (Mucus); **SPRM** (Sperm); **CRY** (Crystals); **CaOxm** (Calcium-oxalate monohydrate); **CaOxd** (Calcium-oxalate dihydrate); **URI** (Uric acid); **TRI** (Triple phosphate); **AMO** (Amorphous material); RBC ghost and RBC-Aca flags.

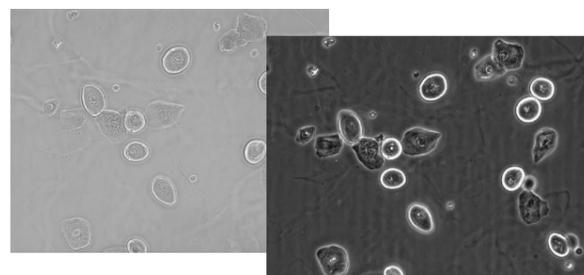*Further classes for manual subclassification are also available.*

New Phase with Contrast

The operation of the instrument is based on the patented UriSed Technology. Working without any special liquid reagents, UriSed 3 PRO performs sample preparation, produces whole view field microscopic images and evaluates them using the Artificial Intelligence-based Evaluation Module (AIEM), an advanced image processing software.

Using the phase contrast technology UriSed 3 PRO provides improved performance. It has outstanding visualization and recognition capabilities for every particle type even the ones that conventional bright-field microscopy cannot easily detect (such as casts and ghost red blood cells).

Urine particles with never-seen-before definition and clarity

Technical Specifications	
Technology:	Cuvette based automated microscopy and image processing
Consumables:	UriSed cuvette
Memory:	10,000 results (including all images)
Throughput:	Up to 150 tests/hour
Magnification:	Zoomable HPF-like images
Displayed images:	Phase contrast, bright-field and composite
Min. sample volume:	
normal mode:	2.0 mL, connected 3.0 mL
pediatric mode:	1.0 mL, connected 1,25 mL
Batch size:	100 test tubes
Barcode reader:	Built-in
Printer:	Optional, external
Interfaces:	USB, LAN, RS232 serial port
LIS connectivity:	LIS2-A2 or HL7
Power:	100-240V AC / 50-60 Hz / max 200 W
Weight:	63 kg (without operating PC)
Size:	600x560x640 mm (WxDxH)

LABUMAT 2

Features & functions

- Evaluates up to 12 chemical and 3 physical parameters
- Cost-effective operation without any special liquid reagents
- Low sample volume; liquid level detection
- Throughput: up to 240 tests/hour
- Advanced, patented detection method
- Increased test strip capacity: up to 300 test strips
- Optional Kit: Increased on-board stability, up to 2 weeks

- Built-in PMC module (Physical Measurement Cell) 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
- RFID based rack identification

Automated Urine Chemistry Analyzer

Urine test strips for LABUMAT smart	Chemical parameters												Calculated		Physical parameters		
	BIL	URO	KET	ASC	GLU	PRO	BLD	CREA	pH	NIT	mALB	LEU	ACR	PCR	Specific gravity	Color	Turbidity
LabStrip U11 Plus GL	■	■	■	■	■	■	■		■	■		■			■	■	■
LabStrip U12 mALB/CREA	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Proficiency and efficiency in urinalysis

The LabUMat 2 is a fully automated urine chemistry analyzer evaluating up to 12 chemical parameters with the available LabStrip urine test strips and 3 physical parameters. 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 – advanced detection technique and intelligent data management provide maximum efficiency while making urinalysis simple.

LabStrip U11 Plus GL
For detection of essential parameters

LabStrip U12 mALB/CREA
For early detection of kidney disease and diabetes

Technical Specifications	
Technology:	Reflectance photometer, 4 discrete wavelengths
Consumables:	LabStrip U11 Plus GL; LabStrip U12 mALB/CREA
Memory:	10,000 results
Throughput:	Up to 240 tests / hour
Test strip capacity:	Up to 300 test strips
On-board stability of strips:	Up to 2 weeks (with optional kit)
Min. sample volume:	
normal mode:	2.0 mL, connected 3.0 mL
pediatric mode:	1.0 mL, connected 1,25 mL
Batch size:	100 test tubes
Barcode reader:	Built-in
Display:	7", 800x600 TFT
Interfaces:	USB, RS232 serial port, PS2, DisplayPort and DVI-D connection
Power:	100 - 250V AC / 50-60 Hz / max 200 W
Weight:	55 kg
Size:	600x560x640 mm (WxDxH)