

## Automate your urine sediment analysis!

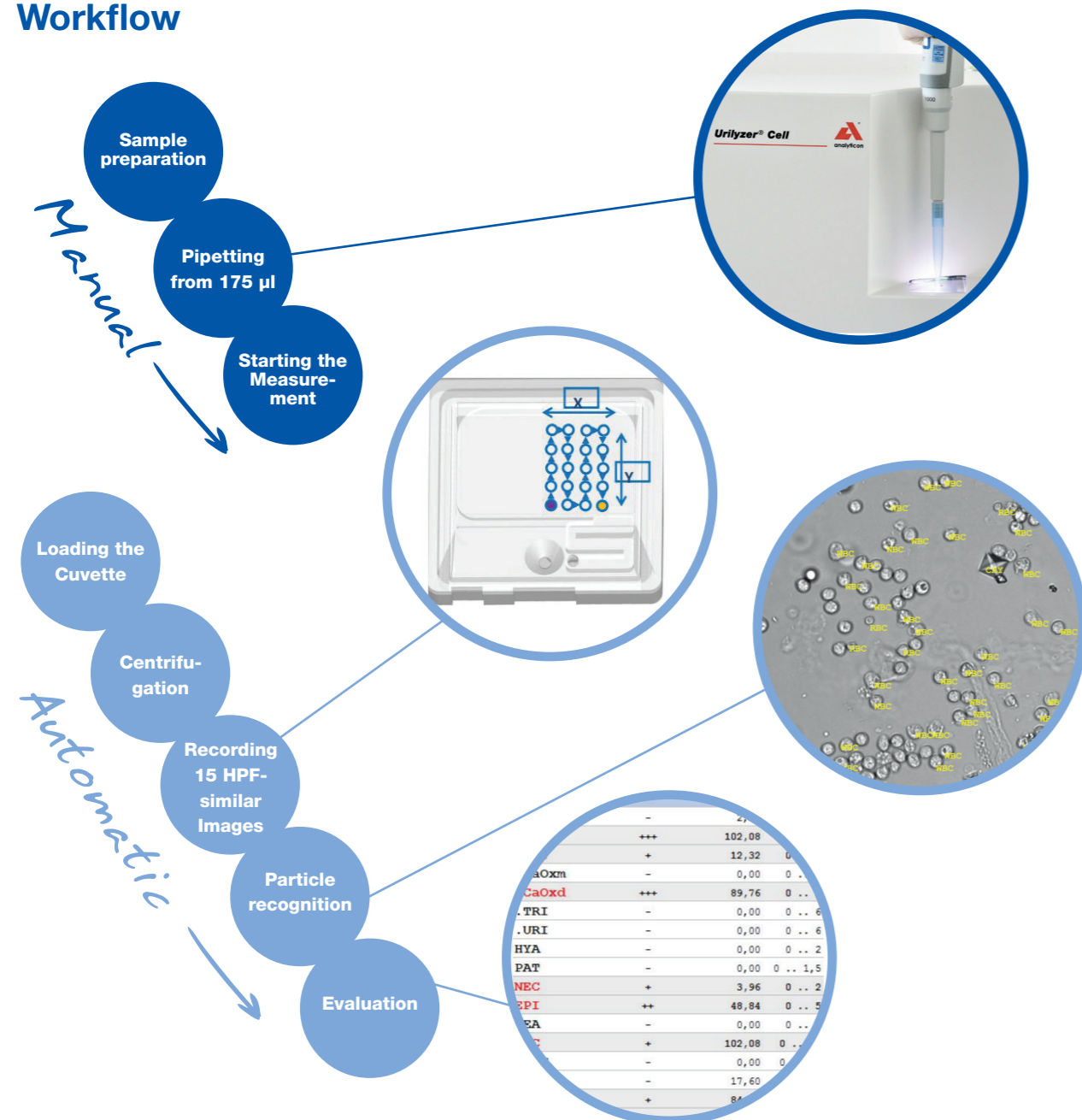


- Easy-to-use
- Sample volume ~ 175  $\mu$ l
- Complete measurement in less than one minute
- Automatic creation of HPF-like brightfield images
- No additional reagents required
- Automatic identification of urine particles
- Real-time microscopy possible in manual microscopy mode
- Connection to a middleware, LIS or urineteststripanalyzer
- User-friendly application software for data processing, result validation and generation of complete analysis reports
- Suitable for laboratories and Doctor's offices with limited space

## Compact, Reliable, Time saving

The Urilyzer<sup>®</sup> Cell is a semi-automated urine microscopy analyzer for professional use. Real-time microscopy is also possible in manual microscopy mode. The Urilyzer<sup>®</sup> Cell increases the reproducibility and accuracy of urine sediment analysis based on the gold standard method. The automation of time-consuming sample processing simultaneously enhances productivity. Its compact design and ease of use make the Urilyzer<sup>®</sup> Cell ideal for use in medical practices and small laboratories.

## Workflow



## Artificial Intelligence-based Evaluation Module (AIEM)

After manual pipetting of the sample into the cuvette, sample processing and microscopy are performed automatically. The microscopy module creates HPF-like brightfield images that are automatically evaluated by a neural network based image processing software algorithm called AIEM, which automatically classifies and counts the urine sediment particles in the images.



Experience report  
Urology Centre North Hesse,  
Kassel

### "Significantly faster, significantly better."

This is the conclusion of the Urology Centre North Hesse in Kassel after the introduction of the Urilyzer<sup>®</sup> Cell for automated urine sediment analysis in routine diagnostics.

The Urology Centre North Hesse is a modern urological practice with a throughput of 50 to 100 urine sediment analysis per day. Previously, urine sediment analysis was performed manually. In order to optimize the time-consuming manual processing of the samples, eight samples were centrifuged simultaneously, followed by manual microscopy of each sample.

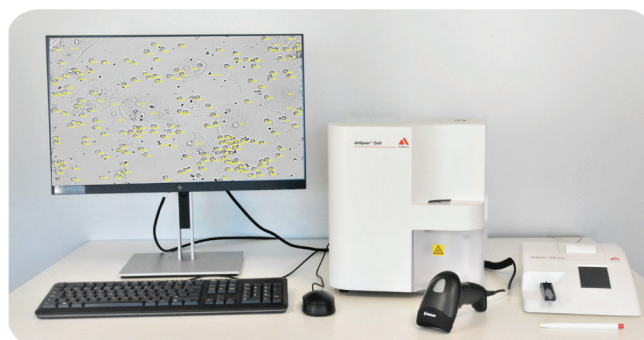
After presenting the Urilyzer<sup>®</sup> Cell, the interest of the urological practice was awakened and the efficiency in the daily laboratory routine was examined in a demo setting. The employees started using the device without any expectations and initially carried out parallel measurements to investigate the comparability of the two methods. From each sample examined, both a manual urine sediment and an automated analysis with the Urilyzer<sup>®</sup> Cell were carried out. It quickly became apparent to the employees that the results of both methods were correspond. "The results are just as good, if not better," was the assessment of the Urology Centre North Hesse. Shortly, the urine sediment analysis was completely changed to the Urilyzer<sup>®</sup> Cell, because "You can trust the device, it is really good", the practice confirmed.

The time savings and the intuitive and simple operation of the device, as well as the accurate results, were decisive for the decision to integrate the Urilyzer<sup>®</sup> Cell into the daily routine of the practice. The changeover to the semi-automatic urine sediment analyzer took place within one day. The work-intensive steps of manual urine sediment analysis can be reduced to 1 minute per sample with the urine sediment analyzer. Since the Urilyzer<sup>®</sup> Cell carries out all steps from sample processing to evaluation of the results fully automatically, the user can concentrate on other activities during this time.

**"We won't give the Urilyzer<sup>®</sup> Cell away and definitely recommend it to others - we are happy to have the device!"**

### Connectivity:

By connecting an Urilyzer® 100 Pro or 500 Pro and linking it to an LIS or middleware, you get a fully comprehensive urine analysis. In less than 3 minutes, both the urine test strip result and the associated sediment result can be viewed in the patient file.



## Technical Specifications

Type	Semi-automated urine sediment analyzer
Measuring technology	Cuvette-based automatic microscopy and image processing
Parameter	Red Blood Cells (RBC), Leukocytes (WBC, WBCc), Hyaline Casts (HYA), Pathological Casts (PAT), Squamous Epithelial Cells (EPI), Non-Squamous Epithelial Cells (NEC), Bacteria (BAC, BACr, BACc), Yeast (YEA), Crystals (CRY) [Calcium-oxalate monohydrate (CaOxm), Calcium-oxalate dihydrate (CaOxd), Uric acid (URI), Triple phosphate (TRI)], Mucus (MUC), Sperm (SPRM) Further classes for manual subclassification are available
Throughput	Up to 60 tests/hour
Sample volume	~ 175 µl
Data storage	Up to 5.000 results (including images)
Display	Monitor, external (included in scope of delivery)
Interfaces	USB, Ethernet, RS 232
Dimensions	305 x 315 x 325 mm (WxDxH)
Weight	10 kg
Power supply	100-250V AC / 50-60 Hz / max. 100W
Operating environment	Temperature: +15°C to +40°C Relative humidity (non-condensing): 20% to 80% at 30° C
Printer	Optional, external
Barcode reader	Optional, external
Protocols	LIS2 (ASTM+), HL7
Features	<ul style="list-style-type: none"> <li>• Integrated centrifuge, integrated microscope</li> <li>• User management with different access rights</li> <li>• Barcode identification</li> <li>• Automatic validation of results</li> <li>• QC- Management</li> </ul>
Languages	German, English, French, Italian, Spanish, Portuguese, Turkish, Polish, Czech, Slovak, Hungarian, Russian

Art.-No.: ULC060

### Accessoires:

Cuvettes	Art.-No.
Urilyzer® Cell Cuvettes (à 600pcs.)	ULC001

### Extras (optional):

Article	Art.-No.
Pipette (100-1000µL)	ULC002
Urilyzer® 100 Pro	UL0100Pro
Urilyzer® 500 Pro	UL0500Pro
Barcodereader	A93025
Connection cable RS 232	A93026

Distributor



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