DxU MICROSCOPY SERIES

AUTOMATED URINE MICROSCOPY ANALYZER

DATASHEET

The DxU Iris Microscopy Series automated urine microscopy analyzer addresses the need for accurate urine particle analysis providing high levels of throughput. The series consists of the DxU 850m Iris with a throughput of 101 samples per hour and the DxU 840m Iris with 70 samples per hour.

Using proprietary Digital Flow Morphology technology with Auto-Particle Recognition (APR) Software, the DxU Microscopy Series helps to isolate, identify and characterize digital images of particles on the screen to virtually eliminate the need for manual microscopy. It is the only urinalysis system regulatory cleared for body fluids with linearity down to zero. Results are streamlined, as there is no need to interrupt the analyzer to switch to body fluid mode.

The DxU Microscopy Series is available as a standalone analyzer or it can connect to the DxU 810c Iris urine chemistry analyzer to form the fully automated DxU Iris Workcell urinalysis system.

STREAMLINE URINALYSIS WORKFLOW WITH STANDARDIZED RESULTS AND WALKAWAY TECHNOLOGY

- The DxU Microscopy Series streamlines urinalysis workflow with significantly lower manual microscopic review rate of less than 3%[1]
- Auto-classify 12 urine particles based on size, shape, contrast and texture
- Operator can further classify particles into 27 predefined sub-classifications to generate broader definition on the urine analysis
- The analyzer uses Edit-Free Release technology which allows the laboratory to auto-verify true positive urines and true negative urines based on user-defined release settings

BECKMAN COULTER

	MICROSCOPY
Menu/Test parameters	› Urine particles: · RBC, WBC, WBC Clumps, Squamous Epithelial Cells, Non-Squamous Epithelial Cells, Hyaline Casts, Unclassified Casts, Crystals, Bacteria, Yeast, Sperm, Mucus › Additional categories for subclassification: · Unclassified casts: Granular, Cellular, Waxy, Broad, RBC, WBC, Epithelial Cell, Fatty Casts · Crystals: Calcium Phosphate, Uric Acid, Calcium Carbonate, Leucine, Cystine, Tyrosine, Amorphous Calcium Oxalate, Triple Phosphate · Non-squamous epithelial cells: Renal Epithelial, Transitional Epithelial · Yeast: Budding Yeast, Yeast with Pseudohyphae · Other: RBC Clumps, Fat, Oval Fat Bodies, Trichomonas, Dysmorphic RBCs › Body fluids: · Cerebrospinal, Pleural, Peritoneal, Peritoneal Dialysate, Peritoneal Lavage, Pericardial, General Serous Fluids, Synovial Fluids
Measurement technology	Digital Flow Morphology using Auto-Particle Recognition Software
Sample throughput	Up to 101 samples per hour
Sample identification and capacity	› Auto-ID barcode or keyboard entry of ID › 10-tube rack system › 60-specimen walk-away capability with continuous feed for each system as standalone or as DxU Iris; up to 200 with optional load/unload modules
Specimen volume	› Minimum: 2.0 mL of un-spun urine › Aspiration: approximately 1.3 mL
Workstation	› Computer with touch-screen monitor › Keyboard › Windows 10 › Mouse
Data storage	Onboard storage of up to 10,000 patient results
Communication interface	Bidirectional with host query
Operating environment	› Temperature: 64-82˚F (18-28˚C) › Humidity: 20-80%, non-condensing
Electrical power requirement	› Microscopy module: 90-240 VAC, 50-60 Hz, 2.5 A › Monitor: 100-240 VAC, 50-60 Hz, 1.7 A

Dimensions and Weight	Depth	Width	Height	Weight
Microscopy module	25.4" (64.5 cm)	20.9" (53 cm)	23" (54.4 cm)	100.0 lbs (46.0 kg)
CPU	10.8" (27.4 cm)	5.5 in (14.0 cm)	12.7" (32.3 cm)	28.0 lbs (13.0 kg)
21.5" Monitor with base	8.6" (21.8 cm)	20.4 in (517.4 mm)	13.8" (35 cm)	23.8 lbs (10.8 kg)
Load/Unload stations	20.5" (52 cm)	9.25" (23.5 cm)	5.7" (14.5 cm)	11 lbs (5 kg)

For more information, please visit www.beckmancoulter.com/DxUIris

References
1. Liu Xuekai, Chen Weibin, Li Xiaolong, et. al. Establishment and validation of auto verification criteria for urine analysis workstation in a multi-center study [J]. Chinese Journal of Laboratory Medicine, 2020, 43(12): 1225-1231. DOI: 10.3760/cma.j.cn114452-20200427-00433.

For Beckman Coulter's worldwide office locations and phone numbers, please visit
www.beckmancoulter.com/contact
DS-355904 | 2021-9472