

Semi-automatic Urine Analyzer

# AUTION ELEVEN

AUTION ELEVEN AE-4020



Compact and lightweight  
with simple structure

**Space-saving design: smaller than \*B4 paper size**

**Measurement speed: 7 seconds per sample**



## Measurement Accuracy

12 qualitative urine items + color tones are measurable.

Additionally, measuring creatinine with protein/microalbumin at the same time makes reliable precision measurement of spot urine.

## Measurement speed

514 samples can be processed in an hour.

It takes 7 seconds to process one sample.

## Auto start, and non-directional test strip placement

The instrument automatically detects a test strip when placed on the test strip tray and starts measurement.

Measurement can be performed regardless of the test strip orientation (pointing right or left).

## Easy to maintain

Components that require daily maintenance, such as the carrying arm, test strip tray, and waste box, have simple structures that can easily be detached and reattached.

## Automatic aspiration of surplus urine

The device automatically aspirates the surplus urine on the test strip and adjusts it to the appropriate volume.

## Further pursuing compactness

Compared to the conventional products, the device is even smaller and lighter. It can be installed in a very small space.



# Usable test strips

## AUTION SCREEN Microalbumin/Creatinine

### Early detection of kidney diseases with spot urine

Microalbumin and creatinine are simultaneously measured.



#### Reaction principle

**Albumin:** when albumin in the urine reacts with the indicator reagent, a red complex is formed and the color of the test pad changes from white to pink. The increased pink color intensity is proportional to the albumin concentration.

**Creatinine:** creatinine in urine reacts with the dye - palladium complex. Due to the decomposition of the complex, the blue-green part on the test pad is discolored and turns yellow. The color intensity of discolored blue-green is proportional to the creatinine concentration.

Albumin/Creatinine ratio

Unit: mg/g, Cr [Albumin (mg/L)/Creatinine (mg/dL)] x 100

Albumin (mg/L)	Creatinine (mg/dL)				
	10	50	100	200	300
10	Dilute				Normal
30			+ 1		
80	+ 2				
150					

## AUTION Sticks 10PA (urine test strips for visual check/device)

### Reliable measurement of protein in spot urine is possible.

Correct protein measurement results may not have been obtained during previous urinalyses that used spot urine samples.

Thanks to AUTION Sticks 10PA, it became possible to perform high precision screening of kidney disease with spot urine via creatinine correction.



Protein/Creatinine ratio

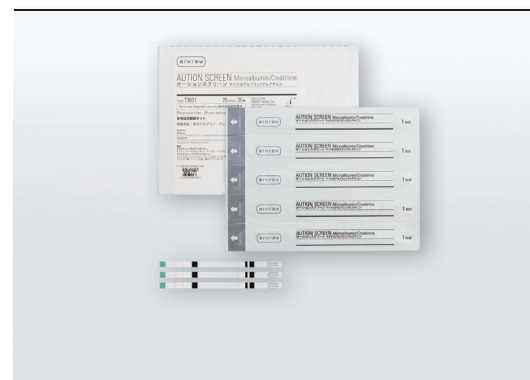
Unit: mg/g, Cr [Protein (mg/dL)/Creatinine (mg/dL)] x 1,000

Protein (mg/dL)	Creatinine (mg/dL)				
	10	50	100	200	300
NEG.	Dilute				Normal
15			+ 1		
30					
100		+ 2			
300					
1000					

Specifications	
Sample	Urine
Test Strip / Reagent pack	AUTION Sticks / Uriflet S / AUTION SCREEN
Measurement item	GLU, KET, BIL, NIT, PRO, URO, pH, BLD, LEU, ALB, CRE, Specific Gravity, color tone
Measurement range	Test strip: As Rank table Color tone: As Color tone classification chart
Measurement method	Test strip method Dual-wavelength reflection photometric method (single wavelength for BLD)
Measurement wavelength	4-wavelength LED (430, 565, 635, and 760 nm)
Test strip reaction time	60 seconds
Processing speed	514 samples per hour (maximum processing mode: 7-second interval)
Display	Custom LC display (icons are used)
Built-in printer	32-digit thermal printer (58 mm width)
External output	Conforms to RS-232C standard (serial) Option: Ethernet
Memory capacity	520 measurement results
Temperature correction	Auto-correction by the internal temperature sensor (between 10 to 30 °C)
S. G. correction	Auto-correction by pH values
Chromaturia correction	Auto-correction by the color tone correction section on test strips
Operating environment	Temperature: 10 to 30 °C; Humidity: 20 to 80% R.H. (non-condensing)
Measurement environment	Temperature: 10 to 30°C; Humidity: 30 to 60% R.H. (non-condensing) *Temperature correction function used
DC power requirements (To instrument)	12 Vdc 3 A
AC power requirements (To AC adapter)	100-240 Vac 50-60 HZ ,1200 mA Voltage fluctuation allowance is ±10%
Power consumption	Max. 45 VA
Dimensions	210 (width) × 328 (depth) × 164 (height) mm
Weight	Approx. 3.6 kg

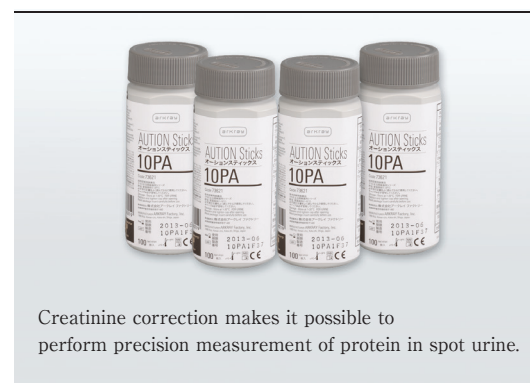
Reagent for testing albumin and creatinine in urine

## AUTION SCREEN Microalbumin/Creatinine



Urine test strips for visual check/device

## AUTION Sticks 10PA



Creatinine correction makes it possible to perform precision measurement of protein in spot urine.

### Legal manufacturer

**arkray factory, inc.**

1480 Koji Konan-cho, Koka, Shiga-ken 520-3306, JAPAN

### European representative

**arkray europe, b.v.**

Prof. J.H. Bavincklaan 2, 1183 AT Amstelveen, THE NETHERLANDS

<https://www.arkray.eu/english/>

\*Designs and specifications may be changed without prior notice.

**arkray global business, inc.**

Yousuien-nai, 59 Gansuin-cho, Kamigyo-ku,

Kyoto 602-0008, JAPAN

TEL 81-75-662-8979 FAX +81-75-431-1202