

## Performance Characteristics

Test Pad	Sensitivity	Specificity	Interference
Specific Gravity	n.a.	n.a.	pH >6.5
Leukocytes	10 WBC/ $\mu$ l	Granulocytes and histiocytes	Alkaline pH, higher SG and high concentration of bilirubin increases the intensity of color reaction
Nitrite	11 mmol/l; 0.05 mg/dl	Specific for nitrite	Diuresis and phenazopyridine
pH	n.a.	n.a.	Foreign substances based on alkaline and/or acidic, old urine with pH about 9
Protein	0.15 g/l; 15 mg/dl	Specific for albumin	Drugs based on quinine and quinolone, alkaline urine with pH >8, traces of some detergents and disinfectants
Glucose	0.9 mmol/l; 16 mg/dl	Specific for D-glucose	Traces of detergents based on peroxides
Ketone	0.1 – 0.2 mmol/l; 1.0 – 2.0 mg/dl	High for acetoacetic acid, low for acetone, none for butyric acid	Drugs based on phenolphthalein or sulphophthalein
Urobilinogen	6.0 $\mu$ mol/l; 0.35 mg/dl	Urobilinogen and stercobilinogen	Phenazopyridine, bilirubin and light
Bilirubin	4,3 – 5.2 $\mu$ mol/l; 0.25 – 0.30 mg/dl	Specific for conjugated bilirubin	High concentrations of Uro and light
Blood	5 RBC/ $\mu$ l	Specific for hemoglobin and myoglobin	Extremely high SG
Creatinine	0.4 mmol/l (0.04 g/l)	Specific for creatinine	High concentrations of ketone bodies (>50 mmol/l)
Microalbumine	0.03 g/l (30 mg/l)	Specific for albumin, much less to other urinary proteins	Drugs based on quinine and quinolone, alkaline urine with pH >8, traces of some detergents and disinfectants

## Ordering Information – Strips

Article Name	REF	S.G.	Leu	Nit	pH	Prot	Gluc	Ket	Uro	Bil	Blood	Cre	Ma	C. PAD	Tests/Vial
Strips for Visual Evaluation															
Convergys® Urine Matrix 10	1000-1128	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	100
Convergys® Urine Matrix 10	1000-1129	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	150
Convergys® Urine Matrix G3	1000-1130	-	-	-	✓	✓	✓	-	-	-	-	-	-	-	100
Convergys® Urine Matrix G2	1000-1131	-	-	-	-	-	✓	✓	-	-	-	-	-	-	100
Convergys® Urine Matrix G+	1000-1132	-	-	-	-	-	✓	-	-	-	-	-	-	-	100
System Strips for Convergys Urostar® 100															
Convergys Urostar® Strips	1100-2302	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	-	✓	150
Convergys Urostar® CM	1100-2303	-	-	-	-	-	-	-	-	-	-	✓	✓	✓	50

Abbreviations: S.G. Specific Gravity, Leu Leucocytes, Nit Nitrite, pH, Prot Protein/Albumin, Gluc Glucose, Ket Ketones, Uro Urobilinogen, Bil Bilirubin, Cre Creatinine, Ma Microalbumin, C.PAD Compensation Pad

Call us for customized parameter combinations

## Ordering Information – Test strip reader

Article Name	Ref	Description
Convergys Urostar® 100	1100-2301	Urine test strip reader

\* Convergent Technologies reserves the right to change any of the specifications without prior notice.  
\*\* Full specifications are available on request.

CT\_U100\_VER001\_20131114

# Convergys® Urine Matrix Urine Test Strips

Convergys® Urine Matrix urine test strips for in vitro diagnostic use provide useful screening information regarding the status of carbohydrate metabolism, hypertension, kidney, liver function, acid-base balance, and urinary tract infections. Only the pathological indications of test parameters need further diagnostic intervention.

**NEW**  
*Enhanced Sensitivity and  
Ascorbic Acid Interference Protected*



## Ascorbic acid interference protected:

The ascorbic acid concentrations of 200 mg/l have no influence on the measurements of urinary Glucose with concentrations of 2.8 mmol/l and above as well as Blood above 10 RBC/ $\mu$ l. Even ascorbic acid concentrations of 1000 mg/l have no influence on the measurements of Nitrites above 2.5 mg/l, 25 Leukocytes/ $\mu$ l, Urobilinogen, Bilirubin, Ketone, Protein, pH and Specific Gravity.



**Convergent**  
Technologies



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**Convergent**  
Technologies

# Convergys Urostar® 100

with the “flex-time” feature is a creative and versatile urinalysis solution for a small to medium-size laboratory, a physician’s practice, a mobile ambulance and a Point of Care (POC) application as well.

## Main features:

- Reflectance photometer with 3 x LEDs (470, 540 and 650 nm)
- A throughput of 60 tests/hour with internal incubation and 240 tests/hour with external incubation using “flex-time” feature
- Auto-calibration at every start or as per operator’s request with Grey Control Strips (included with Convergys Urostar® 100). For more accurate results the creatinine albumin strips contains a six-digit calibration code
- User-friendly menu structure
- Applicable parameters: Specific Gravity, Leucocytes, Nitrite, pH, Protein, Glucose, Urobilinogen, Bilirubin, Blood, Creatinine, Microalbumin, and Albumin to Creatinine ratio
- Automatic strip configuration recognition
- Lightweight and portable: affords ease-of-use for POC applications (works with 6 x 1.5V AA batteries)
- “Add a comment” feature to insert remarks for each measured parameter
- RS 232 and USB ports for LIS, Barcode Reader, Keyboard and PC connection

## Specifications of Convergys Urostar® 100

Applicable Parameters	Specific Gravity, Leucocytes, Nitrite, pH, Protein, Glucose, Ketones, Urobilinogen, Bilirubin, Blood, Creatinine, Albumin and Microalbumin to Creatinine ratio
Measuring Principles	Semi-quantitative reflex photometer with 3 x LED + color detector
Wavelengths	470, 540, 650 nm
Throughput	60 tests/hour with internal incubation and 240 tests/hour with external incubation
Calibration	Automatic, using calibration strips or calibration code
User Interface	Colored 320x240 touch panel TFT
Connectivity	Connection to external keyboard or bar code reader
Data transfer	External communication to PC / LIS via RS 232 or USB port
Printer	Built-in thermo printer, 2sec / parameter
Data Storage Capacity	200 measurements
Languages	Global application with comprehensive language packs (EN, DE, FR, IT, RU, PL, CZ, HU, PT)
External Power Source	7.5V DC switch adapter 100-240 V / 50-60 Hz
Internal Power Source	6x 1,5V AA size battery
Power Consumption	20W max / 1W standby
Operating Conditions	Optimum range 15-35 °C, relative humidity 20-80 %
Dimensions	230 x 127 x 110 mm
Weight	0,8 kg without adapter, battery and paper roll

## Compatible Strips for the Convergys Urostar® 100

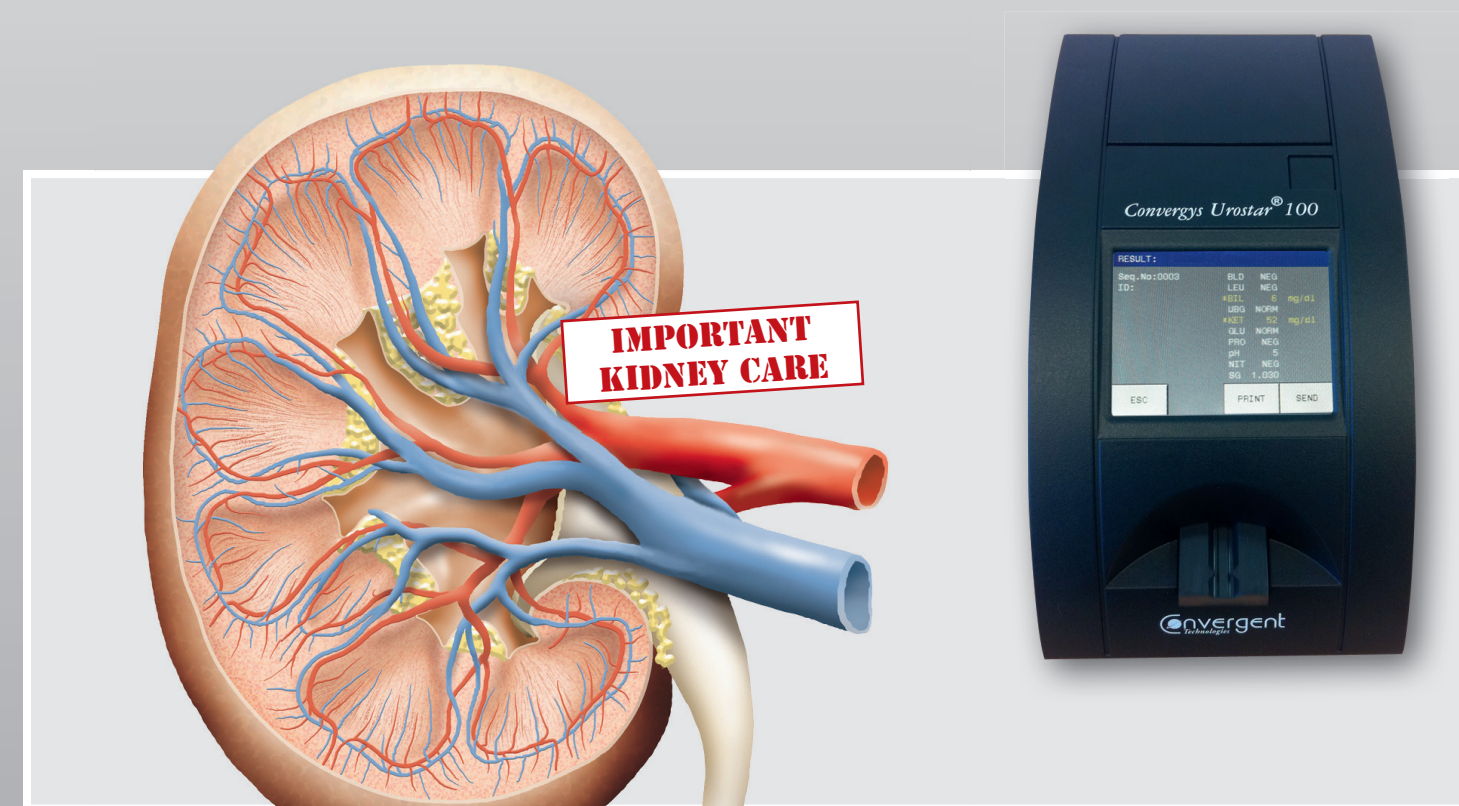
REF	Article Name	Test Parameter	Tests / Vial
1100-2302	Convergys Urostar® Strips	Specific Gravity, Leukocytes, Nitrite, pH, Protein, Glucose, Ketones, Urobilinogen, Bilirubin, Blood, Compensation Pad	150 Strips
1100-2303	Convergys Urostar® Strips CM	Creatinine, Microalbumin, Compensation Pad	50 Strips

# Convergys Urostar® Strips CM for the detection of Microalbuminuria

Timely detection of *microalbuminuria* is extremely important to detect kidney disease (nephropathy) and other diabetes related complications. It is also a strong predictor of cardiovascular disease and an early marker of diabetic pregnancy.

**Diabetes UK\*** strongly recommends regular urinary checks for albumin for an early detection of kidney disease\* which can have as much a devastating effect on the quality of life as other complications as amputation and blindness.

*Convergys Urostar® Strips CM* for professional use offer you a reliable screening test for microalbumin and creatinine through your physician and healthcare provider.



## Interpretation of results:

**Albumin** – *Albumin* is normally present in urine at concentrations of less than 0.02 g/l (2 mg/dl). *Microalbuminuria* is indicated with results of 0.02 – 0.3 g/l (2 – 30 mg/dl).

**Creatinine** – *Creatinine* is normally present in urine at concentrations of 2.2 – 26.5 mmol/l (0.25 – 3.0 g/l).

**Albumin to Creatinine Ratio** – *Albumin* is present in urine at concentrations of less than 3.4 mg albumin/mmol creatinine (0.03 g albumin / g creatinine). *Microalbumin* is indicated at ratio results of 3.4 – 33.9 mg/mmol (30 – 300 mg/g). Higher ratio values are indicative of clinical *albuminuria* (*proteinuria*).

*Convergys Urostar® 100* is used for a fast and objective semi-quantitative evaluation of *microalbuminuria*.

\*The report dated 15.07.2013 and is titled – “Quarter of people with diabetes not getting vital kidney check” and could be accessed using the following link: [http://www.diabetes.org.uk/About\\_us/News\\_Landing\\_Page/Quarter-of-people-with-diabetes-not-getting-vital-kidney-check/](http://www.diabetes.org.uk/About_us/News_Landing_Page/Quarter-of-people-with-diabetes-not-getting-vital-kidney-check/)