

MEDI-TEST AND URYXXON® RELAX ANALYSER



Medi-Test is a suitable screening tool for detection of diabetes, metabolic abnormalities, liver diseases, biliary and hepatic obstructions, haemolytic diseases and diseases of the kidneys and urinary tract. The URYXXON® Relax analyser is a perfect partner for the Medi-Test Urinalysis test strip range. It accurately reads the test strips and provides a print out of the quantitative measurements of the analyte.

Medi-Test Strip Parameters

Product	Glucose	Protein	pH	Ketone	Blood	Nitrite	Bilirubin	Urobilinogen	Specific gravity	Leukocytes	Ascorbic acid
Medi-Test Glucose	Yes	No	No	No	No	No	No	No	No	No	No
Medi-Test Protein 2	No	Yes	Yes	No	No	No	No	No	No	No	No
Medi-Test Ketone	No	No	No	Yes	No	No	No	No	No	No	No
Medi-Test Combi 2	Yes	Yes	No	No	No	No	No	No	No	No	No
Medi-Test Combi 5N	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	Yes
Medi-Test 5S	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Medi-Test Combi 8	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Medi-test 10® SGL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

Medi-Test Principle

Glucose: The detection is based on the glucoseoxidase-peroxidase-chromogen reaction. Apart from glucose, no other compound in urine is known to give a positive reaction.

Protein: The test is based on the 'protein error' principle of indicators. The test zone is buffered to a constant pH value and changes colour from yellow to greenish blue in the presence of albumin. Other proteins are indicated with less sensitivity.

pH: The test paper contains indicators which clearly change colour between pH 5 and pH 9 (from orange to green to turquoise).

Ketones: The test is based on the principle of Legal's test. Acetoacetic acid and acetone form with sodium nitroprusside in alkaline medium a violet coloured complex.

Blood: The detection is based on the pseudoperoxidative activity of haemoglobin and myoglobin, which catalyse the oxidation of an indicator by an organic hydroperoxide producing a green colour.

Nitrite: Microorganisms, which are able to reduce nitrate to nitrite, are indicated indirectly by this test. The principle of Griess reagent is the basis of this test. The test paper contains an amine and a coupling component. A red coloured azo compound is formed by diazotisation and subsequent coupling.

Bilirubin: A red azo compound is obtained in the presence of acid by coupling of bilirubin with a diazonium salt.

Urobilinogen: The test paper contains a stable diazonium salt forming a reddish azo compound with urobilinogen.

Density (Specific Gravity): The test determines the concentration of ions in urine and shows a good correlation to the refractometrical method. The colour of the test strip changes from deep blue in urine with low ionic concentration through green to yellow in urines with high ionic concentrations.

Leukocytes: The test is based on the esterase activity of granulocytes. This enzyme splits carboxylic acid ester. The alcohol constituent released reacts with a diazo salt producing a violet colour

Ascorbic acid: The detection is based on the decolouration of Tillman's reagent. In the presence of ascorbic acid, a colour change takes place from blue to red.

URYXXON® Relax Analyser Operating Principle

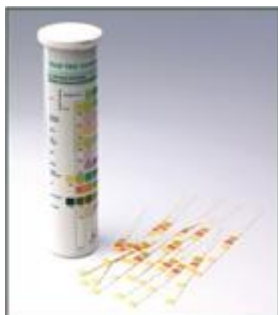
The URYXXON® Relax is a reflection photometer for the analysis of urine test strips. The test strip moves below a fixed measuring head on a sled with an embedded reference pad. The reflectometric analysis of the test strip and the reference field take place during withdrawal and release of the sled.

The strip is illuminated with an LED and a detector registers the intensity of light reflected by the test strip at three different wavelengths. Using an internal calibration, the results are calculated from the reflection values. When samples are strongly alkaline, a density correction is automatically conducted.

Storage and Stability of device and consumables

Analyser and consumables		Operating temperature (°C)	Storage temperature (°C) & Shelf Life	Time to bring to Operating temperature
URYXXON®	Analyser	10-40°C (Ideal working temperature is 20-26°C)	4-30°C	Ready to use at room temperature (Operating temperature)
	Medi-Test Strip	Room Temperature	4-30 °C until expiry	Allow sufficient time to bring to room temperature if required
	Medi-Test Control Solution	Room Temperature	2-8°C until expiry After the first use, each reagent solution may be used for up to three months or for dipping test strips up to 20 times, whichever occurs first	Allow sufficient time for the control solution to warm up to room temperature

Test Procedure



Remove a test strip and close the container to protect remaining strips from humidity and to retain integrity.



Dip the test strip into a fresh urine sample for about 1 second. Wipe off excess and blot the edge.



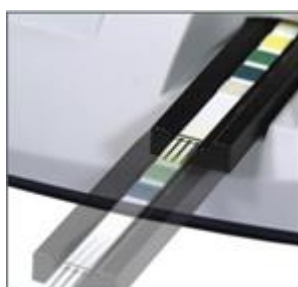
After 30-60 seconds, read the result by comparing the test fields with the colour scale on the pack.



Alternatively, place the test strip on the URYXXON® Relax Test Strip Reader, as per the instructions below.



If required, patient name/ID can be entered easily via the touchscreen. Press the tick box to confirm.



Place strip on the carriage. Testing will start automatically when the strip is ready to be tested.



Results are clearly displayed with abnormal results flagged for further investigation.