

SKYLA HB1

The skyla™ HB1 Analyser is a fully automated, simple to use, compact and portable point-of-care device. It provides an easy and accurate method to measure up to 15 biochemical markers in whole blood, plasma, or serum.

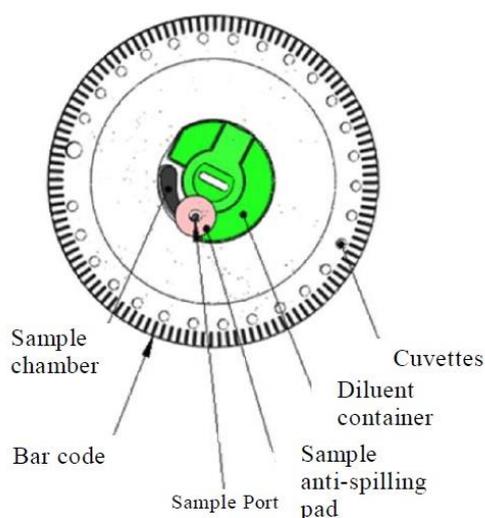
Operating Principle

The portable design of the Clinical Chemistry Analyser utilizes precision photometric measurement technology, combined with the use of specific reagent discs.

All the chemical reactions that take place in the analyser are completed inside a transparent plastic reagent disc. A series of automated liquid handling and reaction procedures on the injected sample are performed inside the reagent disc, enabling accurate and reproducible test results.

Each reagent disc contains a set of dry assay reagents needed for the specified panel of test markers. Up to 15 clinical chemistry markers can be simultaneously tested in a single analysis.

Reagent disc



During analysis, if a whole-blood sample is being tested, the analyser will first perform a centrifugation step, separating the plasma and blood cells within the reagent disc.

Next, accurately quantified sample and diluent are delivered to the mixing chamber for dilution. The fully diluted sample is then distributed to all reaction cuvettes in the disc by centrifugal force, where chemical reactions with the assay reagents occur.

Clinical chemistry markers are quantified by photometric measurement of the absorbance changes arising from these chemical reactions.

Types of Reagent discs

Available Panels	ALB Albumin	ALP Alkaline Phosphatase	ALT Alanine Aminotransferase	AMY Amylase	AST Aspartate Aminotransferase	BUN Blood Urea Nitrogen	CPK Creatine Phosphokinase	CREA Creatinine	CRP C-reactive protein	DBIL Direct Bilirubin	GGT Gamma Glutamyl Transpeptidase	GLU Glucose	HDL High Density Lipoprotein	LIPA Lipase	TBIL Total Bilirubin	TC Total Cholesterol	TG Triglyceride	TP Total Protein	UA Uric Acid	Ca Calcium	Cl Chloride	K Potassium	Na Sodium	PHOS Phosphorus	tCO ₂ Total Carbon Dioxide	A/G Ratio*	eGFR*	GLOB*	IBIL*	LDL*	VLDL*	*Calculated Values			
General Biochemistry																																			
Basic Biochemistry																																			
Metabolic																																			
Liver																																			
Renal																																			
Lipid																																			
ER																																			
ER III																																			
Renal Focus																																			
Liver Focus																																			

Test Panels	Parameters	*calculated values
General Biochemistry	ALB, ALP, ALT, AST, BUN, CREA, GGT, GLU, TBIL, TC, TP, UA, A/G*, eGFR*, GLOB*	
Basic Biochemistry	ALB, ALT, BUN, CREA, GLU, TP, UA, A/G*, eGFR*, GLOB*	
Metabolic	ALB, ALT, AST, BUN, CREA, GLU, TP, UA, Ca, Cl, K, Na, PHOS, A/G*, eGFR*, GLOB*	
Liver	ALB, ALP, ALT, AST, DBIL, GGT, GLU, TBIL, TP, A/G*, GLOB*, IBIL*	
Renal	ALB, BUN, CPK, CREA, GLU, Ca, Cl, K, Na, PHOS, eGFR*	
Lipid	GLU, HDL, TC, TG, LDL*, VLDL*	
ER	ALT, AMY, AST, BUN, CPK, CREA, GLU, LIPA, Ca, Cl, K, Na, PHOS, eGFR*	
ER III	ALT, AMY, AST, BUN, CREA, CRP, GGT, GLU, LIPA, TBIL, K, Na, eGFR*	
Renal Focus	BUN, CREA, TP, UA, K, Na, eGFR*	
Liver Focus	ALT, AMY, AST, CREA, LIPA, eGFR*	

Storage and Stability of device and consumables

Analyser and consumables		Operating temperature (°C)	Storage temperature (°C) & Shelf Life	Time to bring to Operating temperature
Skyla HB1	Analyser	10-32°C	<65°C	Ready to use at room temperature (10-32°C)
	Reagent Discs	2-8°C	2-8°C until expiry date	Use immediately from refrigerator
	Bio-Rad Liquid Assayed Multiquel Control solution	18 - 30 °C	-20°C to -70°C up to 3 years Once thawed but unopened, refrigerate at 2-8°C for up to 30 days Once open, refrigerate at 2-8°C for no more than 14 days	Minimum of 20 minutes to bring temperature up from 2-8°C to operating temperature (18-30 °C)

Test Procedure



Remove the aluminium strip covering the sample port



Add a 200µl blood sample onto the disc



Insert the reagent disc into the analyser



Results available within minutes