

care START™

S1 Analyzer

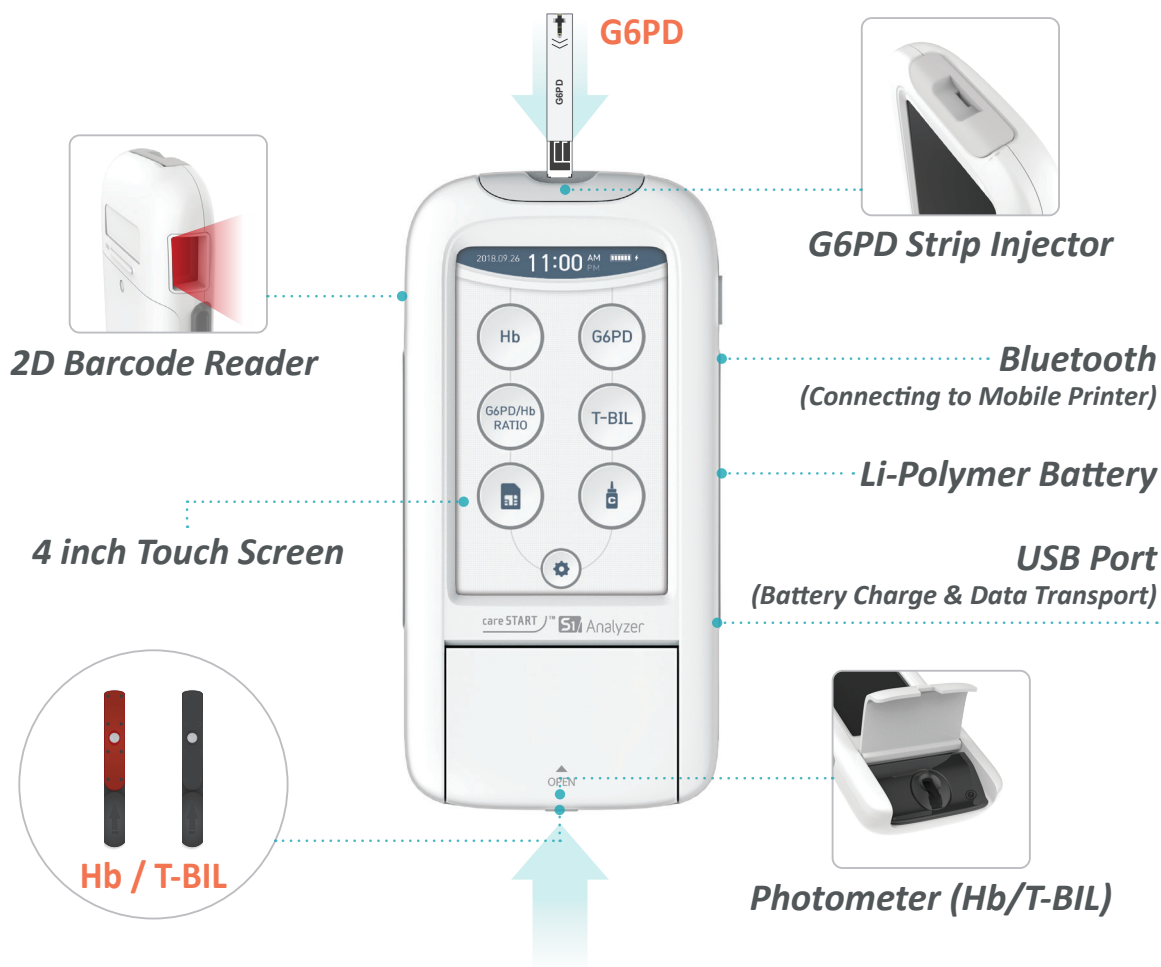
Increase workflow efficiency
with rapid and reliable results



FEATURES

- No requirement for pretreatment or manual step
- Tiny volume of whole blood specimen (Capillary available)
- Short turnaround time within 4 minutes
- User-friendly interface design

careSTART™ S1 Analyzer



Total-Bilirubin Technology Modified Malloy-Evelyn optical sensing technology

Total Bilirubin + Diazo Reaction → Azobilirubin → Measurement of Reflectance

Performance

ACCURACY : The results from clinical studies comparing the careSTART™ S1 Total Bilirubin Strip to 7020 Hitachi Automatic Analyzer are summarized below.

careSTART™ S1 Total Bilirubin vs 7020 Hitachi Automatic Analyzer

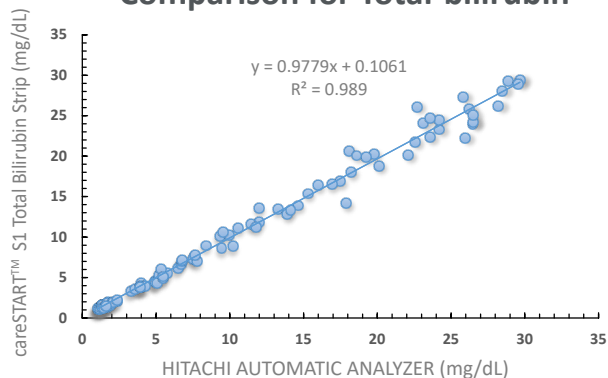
N = 100 Samples

Specimen : Venous Blood

Regression analysis for Total-bilirubin concentration

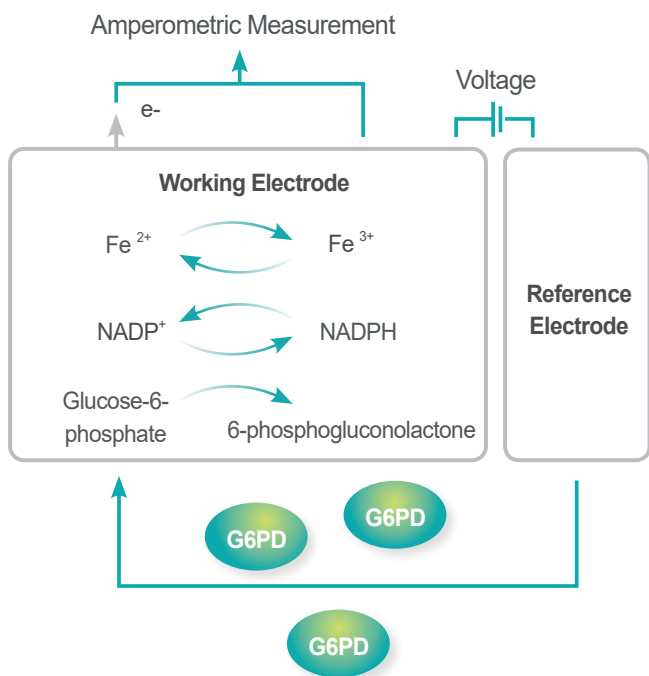
Linear regression	R ²	N	Range [mg/dL]
Y=0.9779x + 0.1061	0.989	100	1.03~29.56

Comparison for Total-bilirubin



G6PD Technology

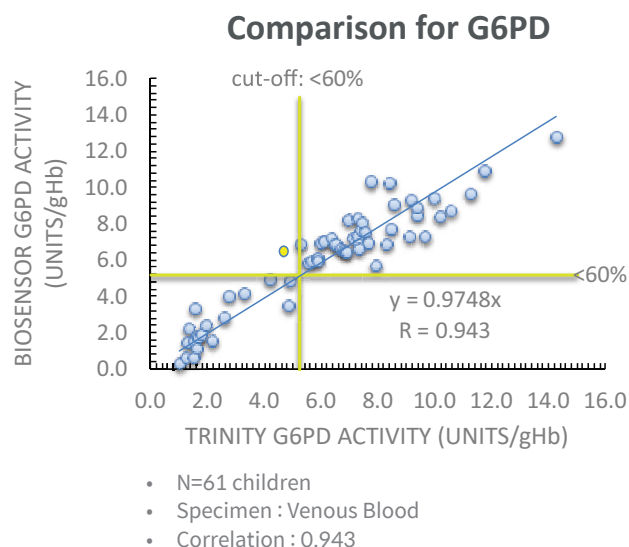
Detection of enzyme activity by electrochemical sensing technology



Performance

G6PD Correlation Analysis: Haiti Study

Only one outlier from the results of comparison study between Trinity and careStart™ G6PD with 60% cut-off



Hemoglobin Technology

Whole Blood $\xrightarrow[\text{Hemolysis}]{\text{Surfactant}}$ Hemoglobin $\xrightarrow[\text{Detection}]{\lambda 525 \text{ nm}}$ Measurement Reflectance

Performance

ACCURACY : The results from clinical studies comparing the careSTART™ S1 Hb strip test strip to the Hemocue Hb 301 microcuvette are summarized below.

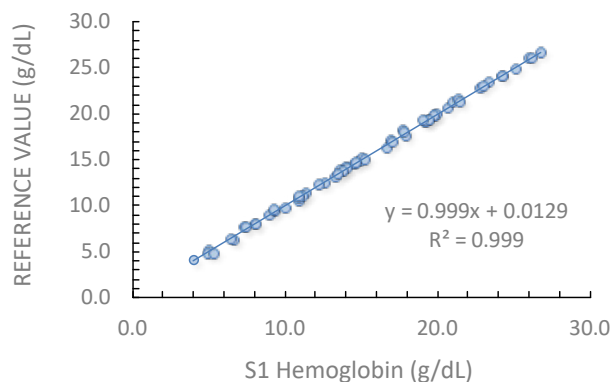
careSTART™ S1 Hb vs. HemoCue® Hb 301.

N = 60 Samples

Repression analysis for hemoglobin concentration			
Linear regression	R ²	N	Range [g/dL]
$Y=0.999x+0.0129$	0.999	60	4.0 ~ 26.8 g/dL

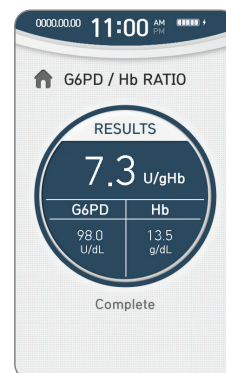
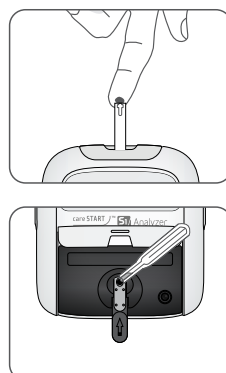
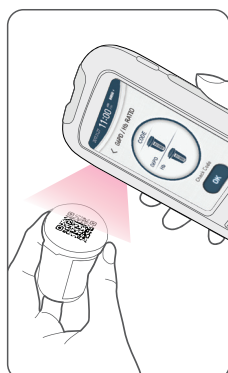
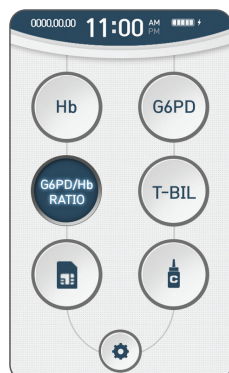
System accuracy for hemoglobin concentration	
Within $\pm 5\%$	Within $\pm 10\%$
58/60 (96.7%)	60/60 (100%)

Comparison for Hemoglobin



Test Procedure

- 1 Select button on the menu to start measurement
- 2 Read the 2D barcode on the strip bottle.
- 3 Insert the G6PD, Hb or T-BIL strip into the sensor port and add the specimen.
- 4 The result is displayed on the screen.



Product Specifications

Parameter	G6PD	Hb	T-BIL
Measuring purpose	Blood G6PD enzyme activity	Hemoglobin concentration	Bilirubin concentration
Measurement principle	Electrochemical method	Optical method	
Specimen type	Capillary and venous whole blood		Capillary and venous whole blood, Plasma, Serum
Specimen volume	7 µL	5 µL	20 µL
Measurement time	4 min	10 sec	1 min
Measuring range	0 ~ 300 U/dL	5 ~ 25 g/dL (3.1~15.5 mmol/L)	Whole blood : 1~30 mg/dL (17.1~513 µmol/L)
	G6PD / Hb Ratio : 0 ~ 20 U/gHb		Serum/Plasma : 0.1~30 mg/ dL (1.71~513 µmol/L)
Memory	Store 1,000 measurement data		
Display	4 inch TFT-LCD, touch screen		
Interface	2D barcode reader & Bluetooth & USB		
Power	Micro 5Pin (5V / 1A)		
Dimension (W x H x D)	81 x 162 x 24.5 (mm)		
Weight	217 g		
Battery	Li-Polymer Battery (3000 mAh)		

Order Information

Product	Cat. No.	Package Size	Product	Cat. No.	Package Size
careSTART™ S1 Analyzer	BSA-E00182	Each	careSTART™ G6PD Biosensor Control	Level I (BGO-N05082) Level II (BGT-N05082)	50 µL x 10 vials w/ Deionized Water (0.2 mL x 5 vials)
careSTART™ S1 G6PD Strip	BSG-E02582	25 strips/vial	careSTART™ Hb Biosensor Control	Level I (HCA-N05082)	600 µL x 5 vials
careSTART™ S1 Hb Strip	BSH-E02582	25 strips/vial	careSTART™ T-BIL Biosensor Control	Level I & II (HCB-N05082)	0.25 mL x 5 vials
careSTART™ S1 T-BIL Strip	BSB-E02582	25 strips/vial			

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