

Technical Specifications

• Technology

- 3-D Topographic Map
- Integral Titanium Incubation System
- Laser Scatter Technology
- Flow Cytometry Technology
- Cyanide Free Reagents
- Random Direction Tube Barcode Scanning Technology

• Parameters

Regular Parameters:

WBC, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV, PLT, PDW, MPV, PCT, P-LCR, NEU#, NEU%, LYM#, LYM%, MON#, MON%, EOS#, EOS%, BAS#, BAS%

Research Parameters:

ALY#, ALY%, IG#, IG%

2 Histograms, 2 Scattergrams

• Test Speed:

Autoloader Mode: 60 Samples/hour

Close Tube Mode: 60 Samples/hour

• Test Mode:

CBC+5DIFF, CBC

• Sampling Mode:

Autoloader: 50 tubes position, random direction tube barcode scanning technology

Close Tube: STAT priority, support both whole blood and capillary blood samples



• Performance

Item	Linear range	Carryover	CV
WBC	1.0-99.9×10 ⁹ /L	≤1.0%	≤2.0%
RBC	0.3-7.0×10 ¹² /L	≤1.0%	≤1.5%
HGB	20-240g/L	≤1.0%	≤1.5%
PLT	20-999×10 ⁹ /L	≤1.0%	≤4.0%

• QC and Calibration

Multiple QC rules, including L-J, X-B etc.
Automated and manual calibration function for both whole blood mode and pre-diluted blood mode

• Power Supply

100V-240V, 50Hz/60Hz

• Operation Environment

Temperature: 15°C -30°C

Humidity: 30%-85%

• **Weight** 75KG

• **Dimension** 61cm(L)×76cm(W)×61cm(H)

Hemaray 86

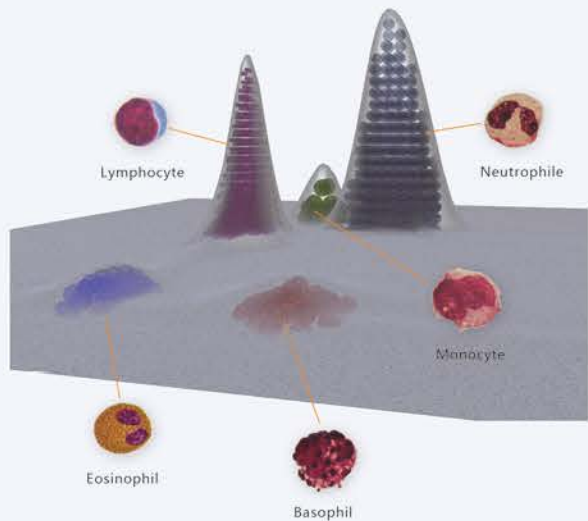
5-part Hematology Analyzer



- 28 Parameters
- 2 Histograms, 2 Scattergrams
- 60 samples/hour
- Autoloader for 50 sample tubes
- 3-D Topographic Maps for WBC
- Integral Titanium Incubation System
- Laser Scatter Technology
- Constant Linear Sheath Flow
- Random Direction Tube Barcode Scanning Technology (Optional)

Hemaray 86

5-part Hematology Analyzer



3-D Topographic Maps for WBC

Cytomorphology, is an useful way of 5-part differentiation of WBC according to the size, complexity and granularity of the cells. The multiple scatter light beams are used to detect the WBC, which named as the 3-D Topographic Map technology. The forward small angle laser beam, the forward large angle laser beam and the lateral laser beam stand for the different properties of the WBC.

Integral Titanium Incubation System

An integrated titanium incubation system is adopted to keep the reagent and the sample in the same constant temperature, which facilitates the complete reaction. This is the key technology to ensure the accuracy of 5-part differentiation.



Constant Linear Sheath Flow

A most important technology is to ensure the WBC passing the laser beam one by one, when the sheath flow passes the unique designed square counting chamber. As the diameter of the WBC will not be too different from the diameter of the transversal surface of the chamber, the WBC are fixed in the middle of the sheath flow passing the square chamber constantly with a high speed. This Constant Linear Sheath Flow ensures the accuracy of the WBC counting.

2 Test Modes

- CBC+5Diff mode
- CBC mode

2 Sampling Modes

- Autoloader
- Close tube



User-friendly Software

Data Management

- 100,000 results storage including histogram and scattergram
- Multi print format including self-defined format
- Mean, CV and SD values are calculated
- Statistics including Sample, QC and Calibration
- Sort by sample number, patient name, type, time frame etc.

Easy Maintenance

- Self-check during start up and shut down
- Tubing automatic maintenance
- Adjustable sleeping mode

Multi-warning System

- Reagent inventory check
- Abnormal original data warning
- Multi warning flags

System Setup

- Different levels of permission
- Different reference ranges determined by age and gender

LIS Interface

- LIS interface with HL7 protocol

