



IVH-51

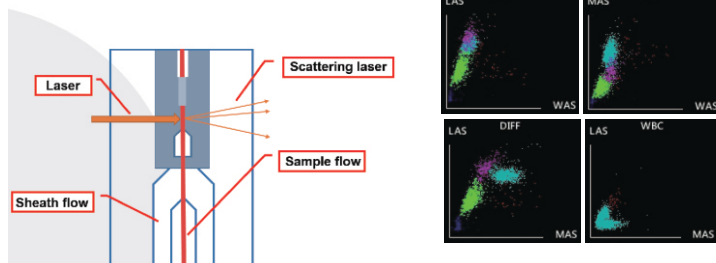
5-Part Auto Hematology Analyzer



ADVANCED TECHNOLOGY

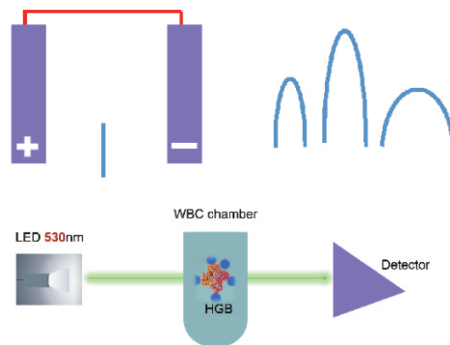
Latest innovation Tri-angle laser scattering and flow cytometry

The Cellomax 5 is a 5-part auto hematology analyzer that uses three reagents to differentiate and count blood cells. It distinguishes four types of WBCs (Lym, Mon, Neu, Eos) and counts Bas using Diff lyse and LH lyse. Blood cells pass through the flow cell at high speed, surrounded by sheath fluid. Tri-angle laser scattering ensures accurate counting by measuring scatter light intensity, which indicates cell size and density. The optical detector converts these signals into electrical pulses to generate a scattergram.



Proven technology Impedance and colorimetric

The instrument counts blood cells by measuring changes in electrical resistance as cells pass through an aperture sensor, generating an analytical histogram from magnified voltage signals. When lyse is added, red blood cells break down, releasing hemoglobin. The hemoglobin-lyse mixture absorbs light at 530nm. Comparing the absorbency of the pure diluent and the sample calculates the hemoglobin concentration.



TECHNICAL SPECIFICATIONS

Principle

Tri-angle laser scattering, flow cytometry for WBC differentiation and count, Impedance for RBC and PLT count, Cyanide-free method for HGB

28 Parameters

EOS#, BAS#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, MPV, PDW-CV, PDW-SD, PCT, P-LCR, P-LCC, NLR, PLR
8 research parameters: LIC%, LIC#, ALY%, ALY#, NRBC%, NRBC#, PLT Clumps%, PLT Clumps#
2 histograms for RBC and PLT, 4 scattergrams for WBC differential

Throughput

60 samples per hour

Calibration

Manual, auto and fresh blood calibration

Quality control

3 level QC, LJ graph, X-B

Sample volume

CBC+ DIFF mode: 20µL Prediluted mode: 20µL

Reagents

3 Reagents (2 Lyses + 1 Diluent)
1 Probe cleanser for maintenance

Printout

Built-in thermal printer
Support external printer, PCL6

Maintenance

Sample probe auto-cleaning

Temperature 10°C-30°C

Interface

4 USB ports, 1 Network port, 1 DB9 serial port
HL7 protocol, Supports bi-directional LIS connection

Blockage clear

High voltage, high pressure flush

Power AC 100-240V, 50/60±1Hz

Dimension 430(D)×350(W)×430(H)mm

Weight 28kg

Display

10.4-inch color touch screen (LCD),
Resolution: 800×600

Storage

60,000 sample results with scattergrams and histograms

PERFORMANCE

Parameter		Precision (CV)
WBC	≤ 2.0%	(4.0 - 15.0)×10 ⁹ /L
RBC	≤ 2.0%	(3.5 - 6.0)×10 ¹² /L
HGB	≤ 1.5%	(110.0 - 180.0)g/L
MCV	≤ 1.0%	(70.0 - 120.0)fL
PLT	≤ 4.0%	(150.0 - 500.0)×10 ⁹ /L

Parameter	Linearity range
WBC	(0-500.0)×10 ⁹ /L
RBC	(0-8.00)×10 ¹² /L
HGB	(0.0-250.0)g/L
PLT	(0-5000)×10 ⁹ /L