

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
Parameters	28 parameters: WBC, LYM%, MON%, NEU%, BAS%, EOS%, LYM#, MON#, NEU#, 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, support 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

Parameters	Precision (CV)	Parameters	Linearity range
WBC	≤ 2.0% (4.0 - 15.0)×10 ⁹ /L	WBC	(0 - 500.0)×10 ⁹ /L
RBC	≤ 2.0% (3.5 - 6.0)×10 ¹² /L	RBC	(0 - 8.00)×10 ¹² /L
HGB	≤ 2.0% (110.0 - 180.0)g/L	HGB	(0.0 - 250.0)g/L
MCV	≤ 1.0% (70.0 - 120.0)f/L	PLT	(0 - 5000)×10 ⁹ /L
PLT	≤ 4.0% (150.0 - 500.0)×10 ⁹ /L		



HT-550
5-Part Auto Hematology Analyzer

Advanced Technology

Latest innovation

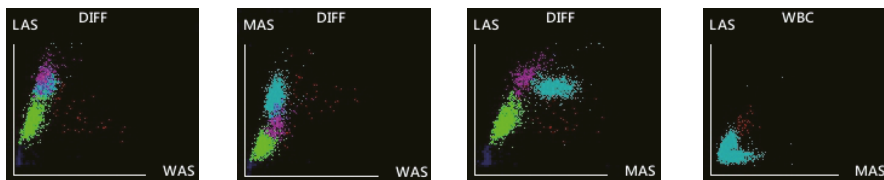
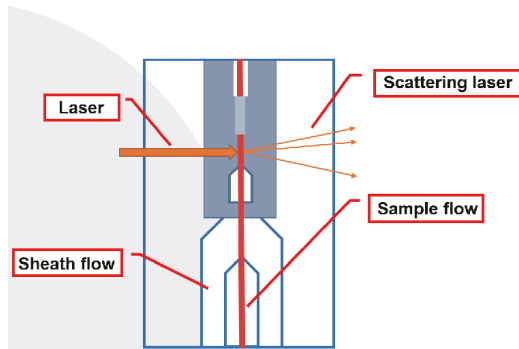
Tri-angle laser scattering and flow cytometry

HT-550 is a real 5-Part auto hematology analyzer. It uses 3 reagents to differentiate and count blood cells.

Diff lyse is added to differentiate 4 types of WBC(Lym, Mon, Neu and Eos), and LH lyse is used to differentiate Baso and count WBC. Besides, there is a dedicated channel for Baso differentiation.

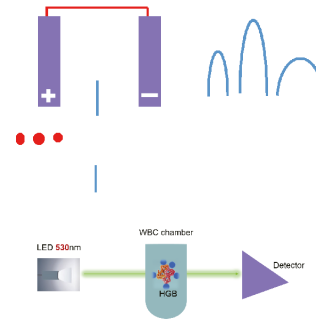
Surrounded with sheath fluid(diluent), blood cells pass through the center of the flow cell one by one at high speed.

The tri-angle laser scattering contributes to more accurate counting. When passing through the flow cell, blood cells are exposed to a laser beam. The intensity of scatter light reflects the blood cell size and intracellular density. The optical detector receives scatter light signals and converts them into electrical pulses. Pulse data is collected to generate a scattergram.



Proven technology

Impedance and colorimetric



The count principle of the instrument is based on the measurement of changes in electrical resistance produced by a blood cell passing through an aperture sensor. Passing through the magnification circuit, the voltage signal will be magnified, which will be derived into impulses, and then analytical histogram will be generated.

Adding lyse in the blood, the red blood cell will rapidly be broken down and release hemoglobin. Hemoglobin and lyse form a new mixture, which can absorb the wavelength of 530nm. Measure the absorbency. Through comparison of the absorbency between the pure diluent and the sample, the concentration of the sample hemoglobin is calculated.

Compact Yet Powerful

User-friendly

The central image shows the HT-550 analyzer with various callouts pointing to its features and benefits:

- Reliable hardware, accurate results**
 - Long life semi-conductor laser to differentiate WBC into 5 parts
 - Ceramic syringe to assure precise reagent or sample aspiration
 - Famous liquid parts (SMC valves and KNF pump) and simplified liquid system
- Built-in operating system**
 - No extra PC required
 - 10.4-inch touch screen
- Powerful data management**
 - Flag information offered for bett
 - Store 60,000 results, easy data transmission
 - 6 short-cut icons, more efficient
- Real-time monitoring**
 - Automatically monitor reagent status
 - Including residual volume and expir
 - Strictly monitor temperature, voltage, pressure and current
- Smart maintenance**
 - Easy routine maintenance
 - Hardware self-checking
 - One-click for basic trouble shooting
- Built-in barcode scanner (Optional)**
 - Input patient data automatically
 - Easy management for reagents
- Convenient printout solution**
 - Built-in thermal printer
 - Support external printer via USB
 - Editable print template
- Cost-effective**
 - 3 reagents (2 Lyse, 1 Diluent) only
 - Lyse placed inside for space saving