

# Technical Specification

## Principles

Tri-angle laser scatter    Flow cytometry method    3D scattergram analysis    Impedance method for RBC and PLT counting    Cyanide free reagent for HGB test

## Parameters

### 25 Reportable parameters:

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

1 3D Scattergram  
3 Histograms(WBC/BASO, RBC, PLT)

### 4 Research parameter:

ALY%, ALY#, LIC%, LIC #

## Test Mode

- CBC mode, CBC+DIFF mode
- Venous whole blood, Capillary whole blood and prediluted

## Throughput

60 tests/ hour

## Performance

Parameter	Linearity Range	Carry Over	CV
WBC	0-300X10 <sup>9</sup> /L	≤0.5%	≤2.0%
RBC	0-8X10 <sup>12</sup> /L	≤0.5%	≤1.5%
HGB	0-250g/L	≤0.5%	≤1.5%
PLT	0-3000X10 <sup>9</sup> /L	≤1.0%	≤4.0%

## Sample Volume

CBC+DIFF mode : ≤20 µl  
CBC mode : ≤10 µl

## Data Memory

Up to 100,000 results(including histogram, scattergram, patient information)

## Display

140 inch touch screen, resolution 1366\*768

## Interface

1 LAN port, 4 USB ports

## Communication

Support HL7 protocol/LIS  
Internal RFID reader

## Printout

Support various external USB printer, printout formats user definable

## Size/Weight

L \* W \* H = 480\*375\*517(MM)  
Weight: 36kg

## Power Requirement

a.c.100-240, 50/60Hz

## Working Enviroment

- Temperature:10-30° C
- Humidity: 20% - 85%
- Air pressure: 70~106kPa
- Working latitude: ≤3500m



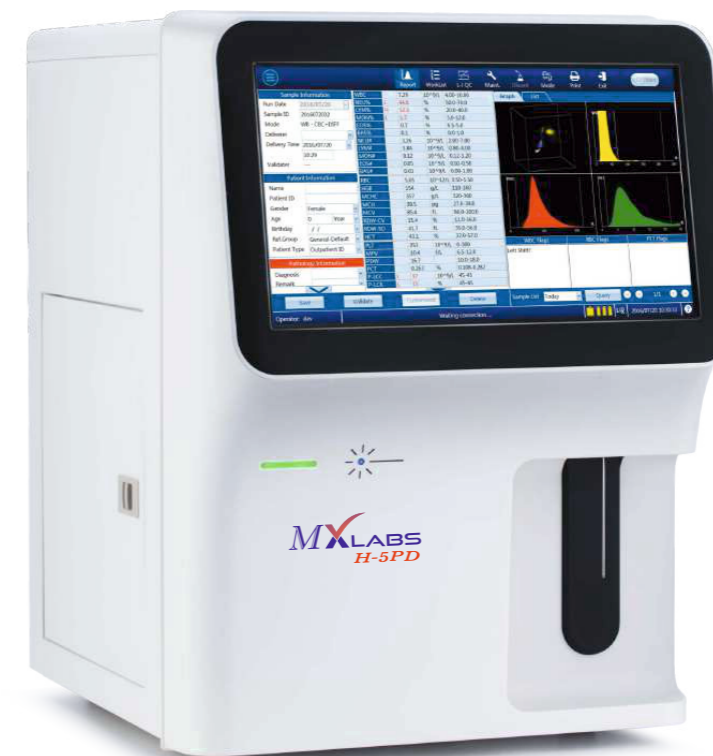
### Matrix Labs

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**MXLABS**  
*H-5PD*

## 5-Part Diff Analyzer



Advantages

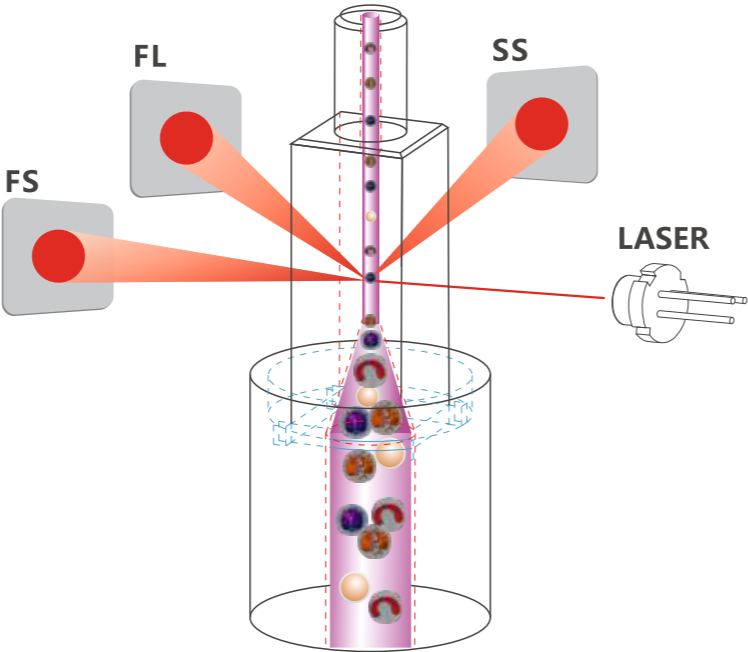
- Inbuilt PC
- Remote Desktop support
- Support all Printers

Principle

Tri-angle laser scatter + flow cytometry + impedance method for WBC.

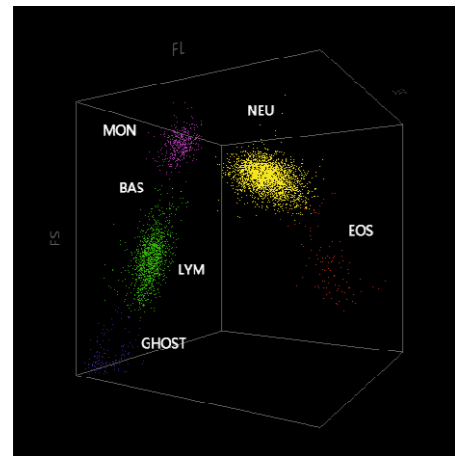
The 5 part differentiation of the white blood cell can be precisely done by collecting the optical signal when WBC pass through the laser beam.

- The front small-angle optical signal can reflect the information of the cell size.
- The front large-angle optical signal can reflect the information of nucleus' structure and complexity.
- The side angle optical signal can reflect the information of granularity complexity.



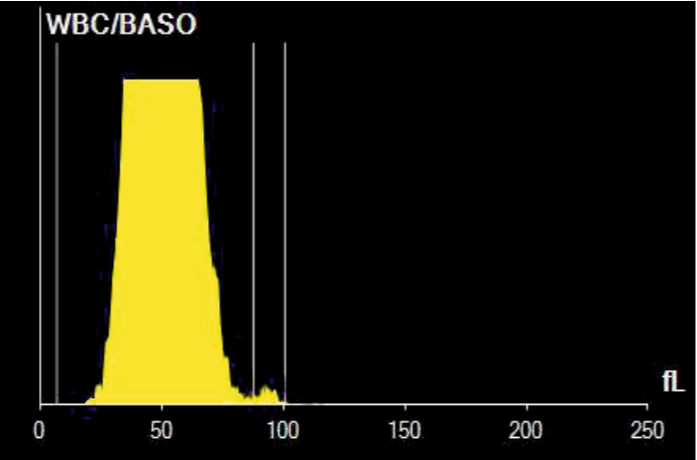
3D Scattergram

3D holographic scattergram display the accurate 5 part differentiation of WBC



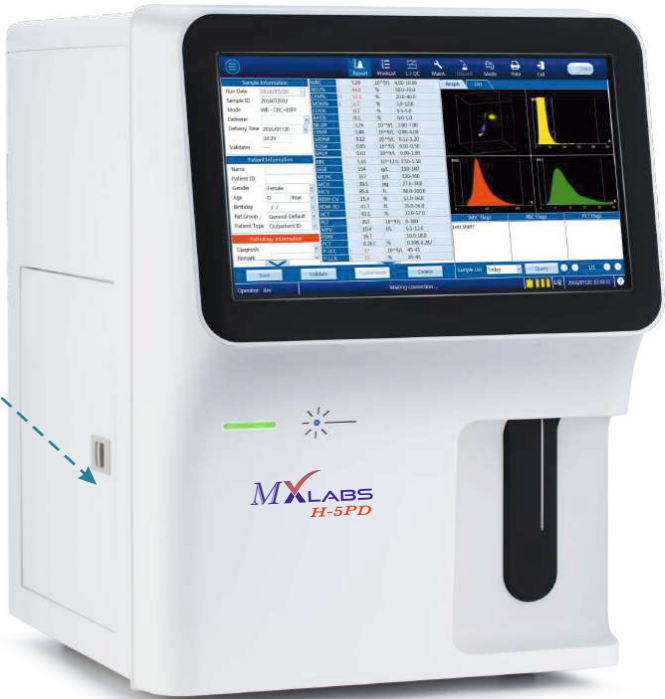
Dual methods for BASO measurement

The first innovative analyzer combined the optical method of BASO(BASO-O) and impedance method of BASO(BASO-I) together, it bring more reliable and stable measurement of BASO pathologic samples, and minimized the analysis failure.



Compact

Compact design with reagents on board, save the valuable bench space of small labs.



Premium large touch screen



14 inch touch screen with high resolution and sensitivity,can be operated by wearing gloves.

SMART-FLOW fluidic patent technology



The creative SMART-FLOW fluidic technology is a simple and efficient system, which makes AC 610 with good reliability and free of maintenance.

Accurate measurement for low value PLT



Advance Sweep-Flow technology guarantees low PLT samples counted precisely.

Low volume sample consumption



CBC+DIFF mode :  $\leq 20 \mu\text{l}$ , CBC mode :  $\leq 10 \mu\text{l}$ , ideal choice for pediatrics and geriatrics.

Low running cost



Only three reagents needed for the test, low reagent consumption for single test.

Easy to use



ONE touch to start the test, ONE click to remove error, ONE screen for most of the daily operation. Intelligent turn off power switch.