

# Alphacount 5P

## Alphacount 5P

### 5- Part Hematology Analyzer

#### TECHNICAL SPECIFICATIONS:

##### ❖ Principles

Electrical impedance, Colorimetry;  
Laser scattering method

##### ❖ Parameters

WBC, BAS#, BAS%, NEU#, NEU%, EOS#, EOS%,  
LYM#, LYM%, MON#, MON%, RBC, HGB, HCT,  
MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT,  
MPV, PDW, PCT, P-LCR, P-LCC;  
ALY#, ALY%, IG#, IG%, NLR, PLR, MLR  
WBC Histogram, RBC Histogram, PL T Histogram;  
2D DIFF Scatter gram x 3; 3D DIFF Scatter gram x 1;

##### ❖ Testing mode

CBC, CBC+DIFF

##### ❖ Sample consumption

Whole Blood: 15 $\mu$ l (CBC+DIFF/CBC)  
Pre-diluted: 20 $\mu$ l(CBC+DIFF/CBC)

##### ❖ Reagents

AC 5P Diluent, AC 5H Lyse , AC 5D Lyse

##### ❖ Throughput

60 T/H

##### ❖ Optional external interface

Bar-code reader, Mouse, Keyboard,  
External printer

##### ❖ Sample types

Whole Blood, Peripheral Whole Blood,  
Pre-diluted blood

##### ❖ System

Integrated windows system displayed by  
10.4 inches color touch screen.  
Bi-directional LIS communication

##### ❖ Link ports: LAN; USB X1

##### ❖ Working Environment: 10°C-30°C; humidity < 85%

##### ❖ Data storage: 100000 results

##### ❖ Power: 110V-240V; 50Hz/60Hz; 400VA

##### ❖ Printer: Internal thermal printer

##### ❖ Size: 365x 470x 525 (mm) Weight 31kg

Test	Linearity	Carry-over	CV (Whole blood)
WBC	0-500 $\times 10^9$ /L	$\leq 0.5\%$	$\leq 2.0\%$
RBC	0-8 $\times 10^{12}$ /L	$\leq 0.5\%$	$\leq 1.5\%$
HGB	0-250g/L	$\leq 0.5\%$	$\leq 1.0\%$
PLT	0-5000 $\times 10^9$ /L	$\leq 1.0\%$	$\leq 4.0\%$

Now With  
MLR, PLR  
& NLR



Accuracy



Reliability



Intelligence



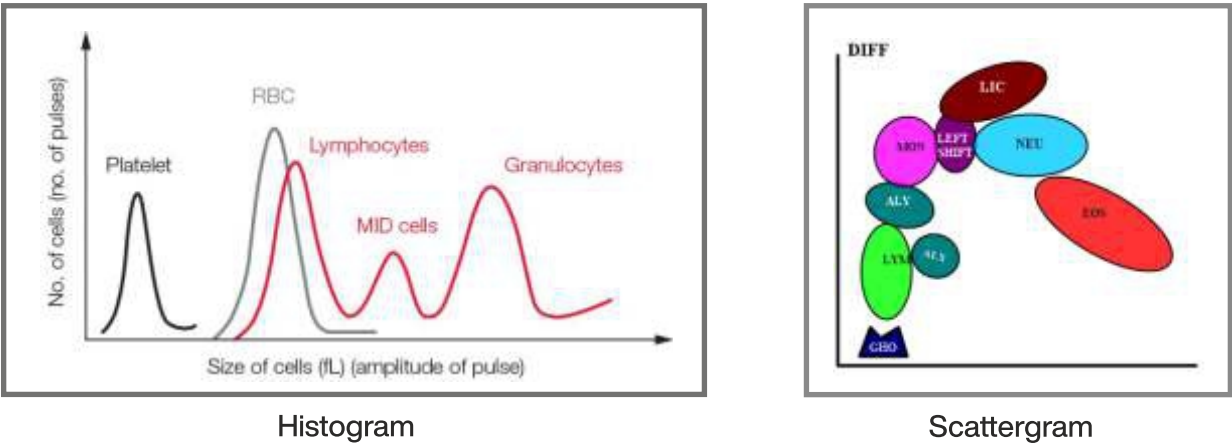
Economic

- ❖ New automated 5-part differential hematology analyzer
- ❖ Tri-angular laser scatter+ Flow cytometry for 5-part WBC counting
- ❖ Independent BASOPHIL counting channel
- ❖ Whole Blood, Peripheral Blood, Pre-diluted blood
- ❖ Throughput of 60 samples / hour
- ❖ 32 parameters



# Upgrade to Automated 5 part Hematology Analyzer

- From 3 part histograms to 5 part scattergrams

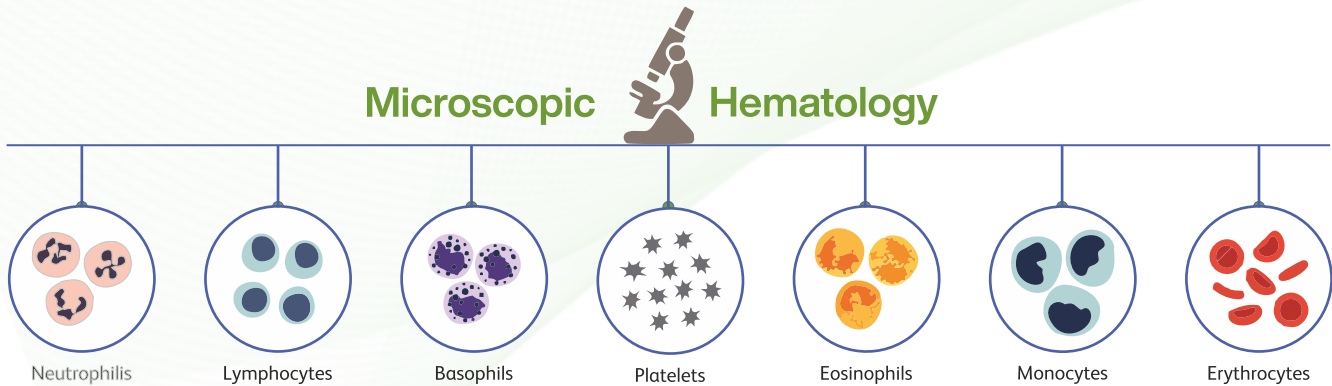


- From mid / granulocyte population to complete WBC differentiation

WBC					
3-part	Granulocytes		Monocytes / Mid-Cells		Lymphocytes
5-part	Neutrophils	Basophils	Monocytes	Eosinophil	Lymphocytes

- From manual interpretation of flagged samples to improved accuracy with minimal manual intervention

The most important aspect of automated hematology analyzers is the ability of the analyzer to detect and flag for abnormal samples. Workflow efficiency can be gained by significantly reducing suspicious flagging and the number of manual differentials. The number of samples that require manual examination can be greatly reduced with more detailed information and improved accuracy provided by a 5-part differential analyzer.

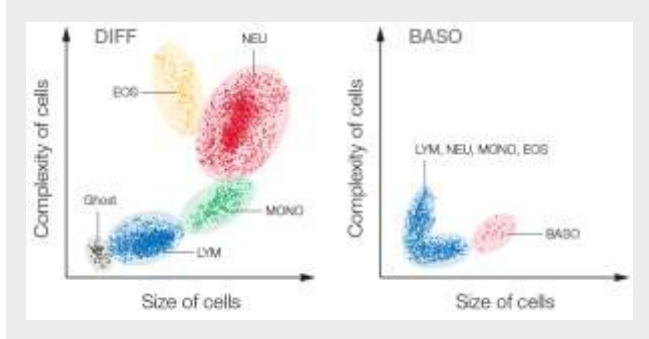


# Integrating best in class technologies in a compact entry level 5 part Hematology system

- 32 parameters including research parameters like Immature Granulocytes, Atypical Lymphocytes , PLCR/PLCC, NLR, PLR & MLR



3 Histograms +  
2D Scattergrams +  
3D Scattergram



Dedicated channel for  
basophills counting – Further  
improvement in accuracy

- LMR NLR PLR (Supplementary Indicators in Diagnosis)

**LMR (lymphocyte-to-monocyte ratio):**

A number of studies have shown that a decline in LMR can be used as a predictor of poor prognosis in cancers, cerebrovascular disease and infections.

**PLR (platelet-to-lymphocyte ratio):**

High PLR has been suggested to be associated with inflammatory response, tumor invasion and prognosis, and may have some predictive value in some cancers, such as gastric cancer, colorectal cancer and cardiovascular diseases.

**NLR (neutrophil-to-lymphocyte ratio):**

High NLR has been found to be associated with tumor invasion, metastasis and poor prognosis, and also has some predictive value in many diseases, such as heart disease, diabetes mellitus, and rheumatic disease and so on.

- Powerful hardware with high quality components

- Components sourced from globally recognized top of line providers.
- Easy to use touch screen
- On-board printer

