MISPA cOunt Plus

5 Part Differential Hematology Analyser

28 Parameters

Parameters : WBC, Ly%, Mono%, Neu%, Eos%, Baso %, ALY%, IMM%, Ly#, Mono#, Neu#, Eos#, Baso#, ALY#, IMM#, RBC, Hb, HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV, PLT, MPV, PDW, PCT, P-LCR

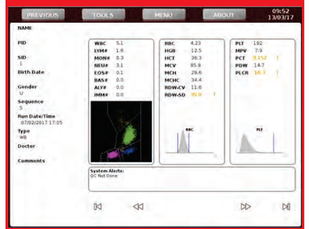
Histogram : For RBC, PLT

Scatterplot: : For WBC

Precision

Measurement	Ranges Tested	Repeatability Limits Whole blood (%CV)
WBC (10^3/µL)	>6.0	< 2.5
RBC (10^6/µL)	>3.5	< 2.0
HGB (g/dL)	>11	< 1.5
MCV (fL)	>80	< 1.0
HCT (%)	>35	< 2.0
RDW-CV	>12	< 4.0
RDW-SD	>40	< 4.0
PLT(10^3/µL)	>200	<5.0
MPV (fL)	>8	<3.0
Lymphocyte (%)	>15	< 5.0
Monocyte (%)	>5.0	< 10
Neutrophil (%)	>40	< 3.0
Eosinophil (%)	>5.0	< 10
Basophil (%)	>1.0	< 40

Scatter Plot & Histograms



View both scatter plot and histogram on single window

Linearity & Operating Range

Measurement	Units*	Measuring Range	Limit	Operating Range
WBC	10^3/µL	0.2 – 100	± 0,4 or ± 4%	0-150
RBC	10^6/µL	0.02 – 8.0	± 0.05 or ± 3%	0-15
HGB	g/dL	0.2 – 24	± 0.2 or ± 2%	0-25
HCT	%	5 – 70	± 2 or ± 3%	0-80
MCV	fL	50-150	±2.5 or ±3.0%	50 - 150
PLT	10^3/µL	10 – 2000	± 10 or ± 10%	0 - 4000
RDW-CV	%	10 – 40	± 1.5 or ± 10%	0 – 70
RDW-SD	fL	15 – 150	± 6.5 or ± 10%	0 – 220
MPV	fL	5 – 25	± 1 or ± 10%	0 – 25
MCH	pg	N/A	N/A	0 – 99.9
MCHC	g/dL	N/A	N/A	0 – 99.9
PCT	%	N/A	N/A	0 – 9.999
PDW	%	N/A	N/A	0 – 99.9
PLCR	%	N/A	N/A	0 - 100
LYM, MONO, NEU, EOS, BASO, ALY, IMM #	10^3/µL	0-100	N/A	0-150
LYM, MONO, NEU, EOS, BASO, ALY, IMM %	10^3/µL	0-100	N/A	0-100

REVOLUTION IN HEMATOLOGY

Technical Specifications

Technology & Principle	
◂ Enhanced Electrical Impedance for Cell counting	
◂ Non-Cyanide method for haemoglobin	
◂ LED based Flow cytometry for Differential	
Sample Volume	Whole blood 15.6 µL and pre-diluted 20 µL
Throughput	60 Samples / Hour
Mode	Open Vial
Sampling modes	Whole blood & Pre-diluted
Counting Modes	Differential, CBC + Differential
Storage Capacity	35,000 results memory with Scatter Plot
Physical Characteristics	
Screen	8.4-inch LCD touch screen
Dimensions	405 x 270 x 430 mm (H x W x D)
Weight	12 kg
Input Power	100 to 240 VAC, 50 to 60 Hz
Output	24V – 6.25 A
Power Consumption	160 W
Working temperature	18°C to 32°C
Relative Humidity	80% max. at 32°C
Flagging	
Pathologic flags	
Reagent alerts	
Instrument alerts	
Interface	
Connectivity	5 USB ports, Ethernet - RJ45, RS232
Barcode Connectivity	Yes (Hand held barcode reader)
External Printer	Yes
Reagents	
D5: Mispa Count Plus	Diluting the blood
L5: Mispa Count Plus	Lysing
C5: Mispa Count Plus	Aperture cleaning and wetting
P5: Mispa Count Plus	Cleaning the probe

ISO 9001:2008
EN ISO 13485:2012 CE

Toll Free No: 1800 425 7151

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MISPA cOunt Plus

5 Part Differential Hematology Analyser

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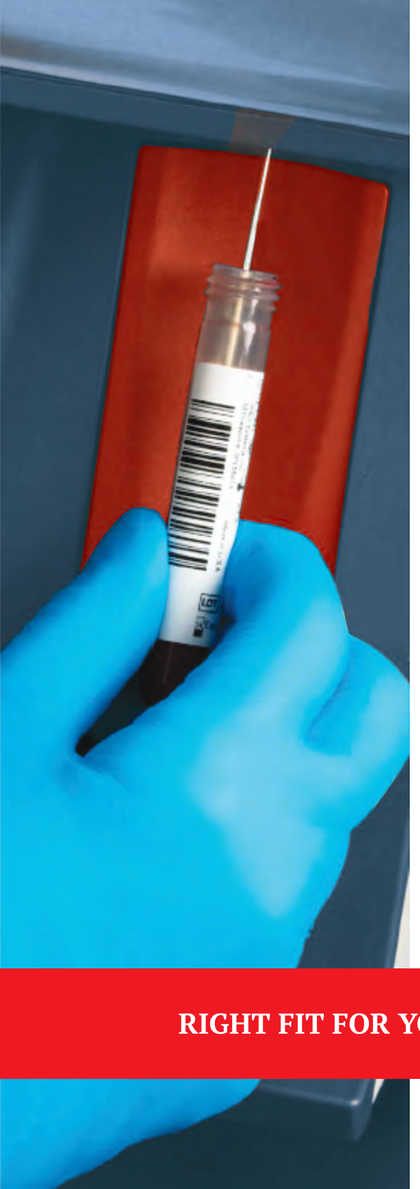


Mispa Count Plus, an Intelligent Open-vial 5-part Differential Hematology System.

Mispa Count Plus Haematology system increases the laboratory efficiency through its compact design, intuitive operation and fast analysis. Designed with perfection the microfluidic technology improves the performance of the analyser and provides the best fit for any laboratory environment.

Agappe's Mispa Count Plus haematology system establishes a new standard in blood count analysis providing remarkable laboratory savings in space, time and operating costs.

PERFORMANCE AT ITS BEST

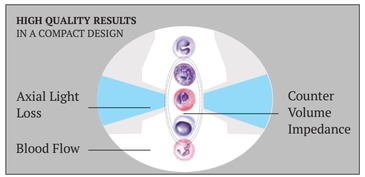
- LED based Flow Cytometry & Triple Counting Technology Which Offers Accurate and Precise results
- 5Part Differential Analyser with 3 Histogram and Scatter Plot for WBC
- 2D Differential Scatter Plot (Diff Scatter Plot) for 5 Part Differentials
- 28 Test Parameters
- Efficient System with throughput of 60 Samples / Hr
- Low cost of operation and improved laboratory efficiency with Cyanide Free Reagent.
- Quality results from as little as 15.6 µL of sample & pre diluted 20 µL
- Patient Memory up to 35000 Samples

RIGHT FIT FOR YOUR LABORATORY

BETTER APERTURE SIZE

Mispa Count Plus is designed with optimized aperture size which offers better count of RBC and WBC using the principle of electrical impedance.

INNOVATIVE TECHNOLOGY



Mispa Count 5 Part differential is based on innovative LBFC (Led-based Flow Cytometry) Technology, which provide accurate and precise count

FIGURE A: 1 MICRON CELL PASSING THROUGH 100 MICRON APERTURE

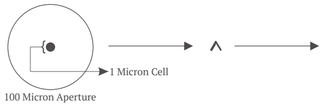
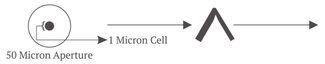


FIGURE B: 1 MICRON CELL PASSING THROUGH 50 MICRON APERTURE



80 micron aperture for WBC and 50 micron aperture for RBC/PLTs for better electrical impedance of cells and hence better counting and differentiation

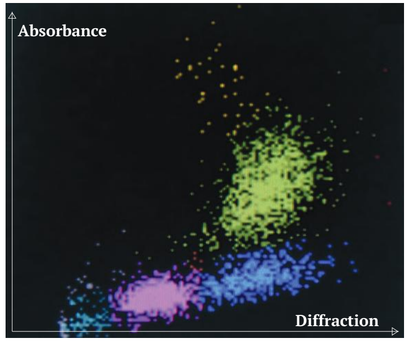
TRIPLE COUNT TECHNOLOGY:

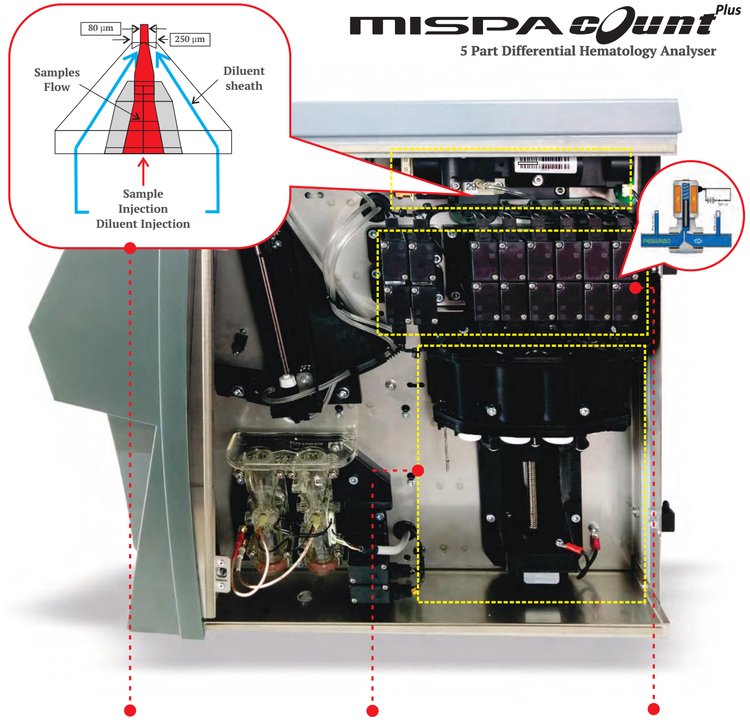
WBC is counted two times using electrical impedance and the value is checked with the count by flowcytometric method to give accurate test results.

WBC SCATTERED PLOT

WBC 5 differential absolute values and percentages are obtained by optic measurement. The measured pulses on the two optical channels are displayed on DIF plot ALL (Y Axis) and FSC (X Axis). Each dot on the DIF plot represents the height in Axial Light Loss (ALL) and Forward Scatter (FS) of each pulse.

Lymphocytes	PINK
Monocytes	BLUE
Neutrophils	GREEN
Eosinophil	YELLOW
Basophilic	ORANGE
Immature cells	RED





MISPA COUNT Plus
5 Part Differential Hematology Analyser

Mispa Count Plus's Cost effective three reagent system with 'HDF' (Hydro Dynamic Focusing) ensures precise and accurate results.

FLOW CYTOMETRY

Highly thermo-chemical resistant, corrosion resistant, Maintenance free and very low coefficients of friction make syringe highly durable.

QUADRA PTFE SYRINGES

Conventional Pinch Valves are replaced with electro magnetic solenoid valves for better durability and offers uninterrupted performance.

ELECTROMAGNETIC SOLENOID VALVES

ACCURATE CELL COUNTING ENSURED