6 PART HEMATOLOGY SERIES

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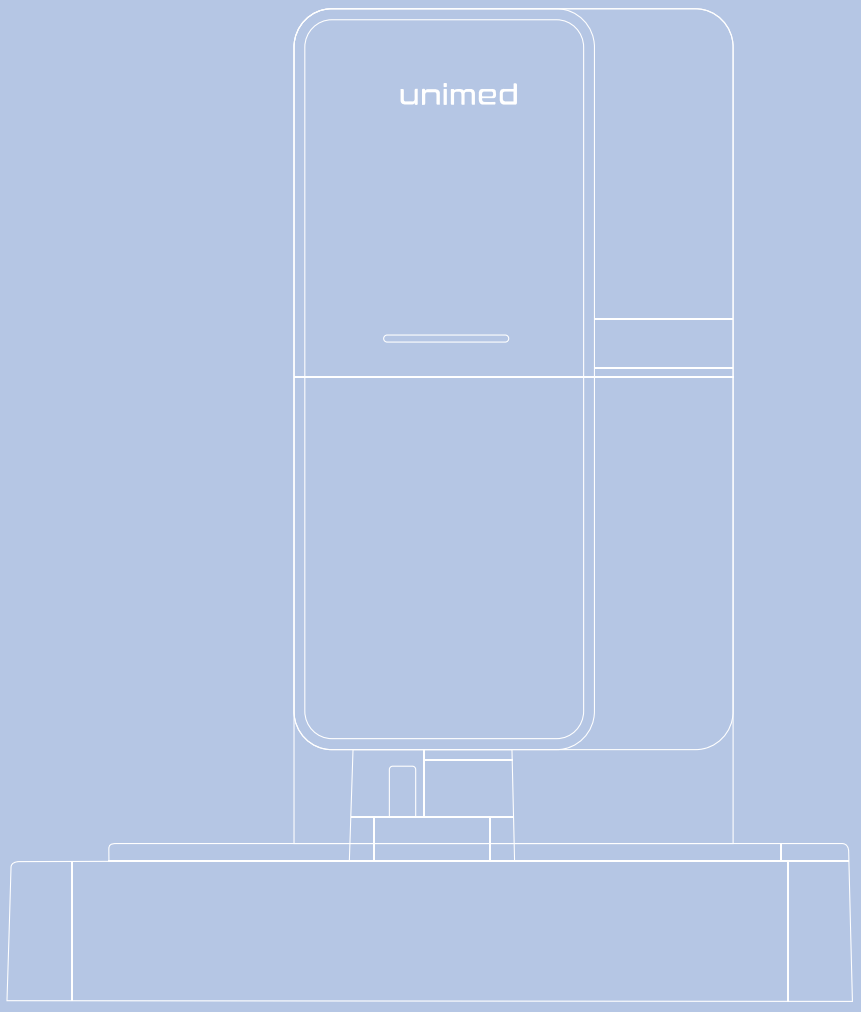
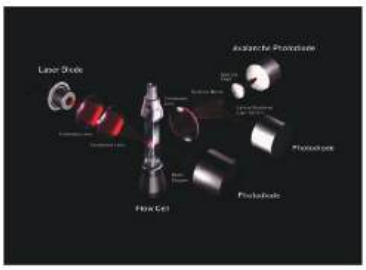
AUTOMATIC HEMATOLOGY ANALYZER
SEEING BEYOND LIMIT

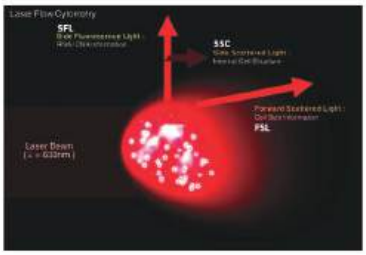


Principal

3rd generation Tech

Fluorescence staining to Nucleic Acid





Special fluorescent staining solution will dye DNA or RNA blandly while 2nd Generation chemistry staining reagents will dye Enzymes/particles in cytoplasm. we know that different cell has different concentration of DNA or RNA , which cause the depth of dying is different. the more DNA or RNA , the stronger fluorescent signal. Since the nucleic acid is the most specific part of cell, so the 3rd Generation is more sensitive to distinguish different leukocyte, especially the abnormal cells

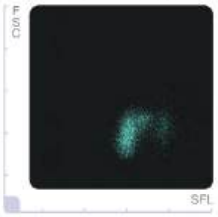
Combine 3rd Generation technology with flow cytometry, A single-cell stream quickly passes through a channel in the middle, and every passing cell is detected by three beams of light from three directions to get size, granularity and nucleic acid information

FSL (Forward Scattered Light) mainly reflects the size of the cells,
SSC (Side Scattered Light) mainly reflects size and number of particle in cells
SFL (Side Fluorescence Light) mainly reflects the concentration of nucleic acid

Multiple channels

FCD Scatter diagram

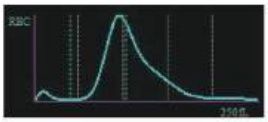
FCW Scatter diagram



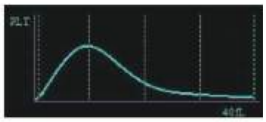
FCR Scatter diagram

In FCW channel, WBC, Baso, and NRBCs results will be provided. Baso and NRBCs are generated without extra reagent or cost
In FCD channel, 6 Part analyzer not only gives WBC 6-part differential results (with immature granulocyte),but also brings 29 research parameters
In FCR channel, 6 reticulocyte results and PLT counting (PLT-O) will be provided. PLT-O can improve the accuracy of low platelet counting

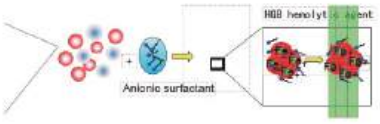
RBC



PLT



HGB



The flow cytometry technology was used on RBC/PLT chamber which not only make more accurate RBC/PLT results but also ensure very low clog rate

Test options:

Sample: WB、Capillary blood、Pre-dilute blood、Body fluid

Efficient

Up to100T/H (CBC+DIFF)
Up to 83T/H (CBC+RET)
Up to 83T/H (CBC+DIFF+RET)
Up to 17T/H (SR)

Visual reagent management

Built-in reagent position for dye
Special loading design: Better separation and much safer

Auto loader

50 position
Built-in barcode for sample tube
Automatically rotate and adjust the barcode position for identification

Automatic rerun and reflect

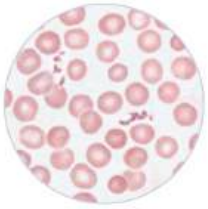
Return the sample racks for an automatic rerun or reflex check.
Comparative analysis of multiple outcomes in the same patient

Easy-to-use software

User-defined interface
Intuitive interface

LW mode

Low White Blood Cell



Resampling, changing channels, increasing the count by 3 times

The increase of counting particles not only makes the detection of low value have better precision, but also enables the classification of white blood cells in low value samples and the sensitive capture of juvenile cells in them, so as to avoid unnecessary risks

SR mode

Besides blood specimen, 6 Part Analyzer Also has body fluid test function without requiring dedicated reagent. The various types of body fluids include Peritoneal fluid, Pleural fluid, Cerebrospinal fluid (CSF) and Synovial fluid

Single prototype

6 Part Automatic Hematology Analysis line test speeed up to 900T/H

Vertical (cabinet) assembly line

INSTRUMENT INTRODUCTION MODEL - UH1100

Detection Technology	Nucleic Acid Fluorescence Staining & Flow Cytometry to count WBC、NRBC and 6-part impedence methed and flowcytometry for RBC/PLT
Detection mode	CBC、DIFF、NRBC
Sample mode	Whole Blood Mode, Low Value Leukocyte Mode, Predilution Mode
Sample volume	Whole blood mode: 88ul Predilution mode: 70ul
Throughput	CBC+DIFF: 100T/H
Reporting parameters (36 in total)	Leukocyte: WBC、NEUT(#,%)、LYMPH(#,%)、MONO(#,%)、EO(#,%)、BASO(#,%)、IG(#,%) Erythrocyte: RBC、HGB、HCT、MCV、MCH、MCHC、RDW-SD、RDW-CV、NRBC(#,%) Platelets: PLT、PDW、MPV、P-LCR、P-LCC、PCT
Auto loader	Up to 50 sample position
Linear range	WBC: 0~500x10^9/L RBC: 0 – 8.60 × 10^{12}/L HGB: 0 – 260g/L PLT: 0~5000x10^9/L

PRECISION

Parameter	Detection Range	Precision/%
WBC	⩾3.50 × 10^9 /L	⩽2.5
RBC	⩾3.50 × 10^{12}/L	⩽2.5
HGB	110g/L – 180g/L	⩽1.0
PLT	⩾100 × 10^9 /L	⩽4.0
HCT or MCV	30% – 50% (HCT) or 80fL – 100fL (MCV)	⩽1.5 (HCT)

INSTRUMENT INTRODUCTION MODEL - UH1120

Detection Technology	Nucleic Acid Fluorescence Staining & Flow Cytometry to count WBC、 NRBC and 6-part impedence methed and flowcytometry for RBC/PLT using semi conductor Laser and Dye Reagents for WBC and WBC Diff
Detection mode	CBC、DIFF、NRBC、RET Hydrodynamic Focus flow detection method for PLT sheath analysis flow Impedance Measurement Cumulative Pulse Height detection method according to the RBC distribution histogram、hematocrit (HCT) detection in unit of %
Sample mode	Whole Blood Mode、Body fluid mode、CSF Fluid、Pleural Fluid、Peritoneal Fluid、Synovial Fluid、Bone Marrow Fluid、Low Value Leukocyte Mode、Predilution Mode
Sample volume	EDTA Whole blood & Body Fluid mode: 88ul Predilution mode: 70ul
Throughput	CBC+DIFF: 100T/H CBC+DIFF+RET:83T/H Body Fluid: 40T/H
Auto Loading	10 Racks 10 Samples/Rack Up to 50 Sample position
WBC (+NRBC) + Diff. Channel (37)	WBC Panel: WBC #、NEU #&%、LYM #&%、MON #&%、EOS #&%、BAS #&%、IG #&% P-LCC、IRF、RET-He、LFR、MFR、HFR、IPF. RBC Panel: NRBC #&%、RBC #、RET #、RET%、HGB、HCT、MCV、MCH、MCHC、RDW-SD、RDW-CV PLT Panel: PLT #、MPV、PCT、P-LCR、PDW Body Fluid (BF) Channel: 7 Parameters WBC Panel:WBC - BF、MN #&%、PMN #&%、TC、BF RBC Panel: RBC、BF
Research Parameters (34) *Total parameters (71 in total)*	HFLC #&%、RBC-O、FRC #&%、RPI、PLT-F、H-IPF、IPF#、WBC-A、TNC-A、PLT-O、Delta-He、HYPO-He、HYPER-He、FCR-UPP、FCR-TNC、RBC-He、PLT-I、WBC-W、WBC-D、TNC、TNC-W、TNC-D、microR、macroR、NEUT#&、NEUT%& LYMP#&、LYMP%&、BA-W#、BA-W%、BA-D#、BA-D%
Linear range	WBC: 0 5 00x 109/L RBC: 0 -8 60x 102 /L HGB: 0 -2 60g/L PL T: 0 5 000x 109/L
Memory	Up to 200000 Samples

PRECISION

Parameter	Detection Range	Precision/%
WBC	≥3.50 × 10^9 /L	≤2.5
RBC	≥3.50 × 10^{12}/L	≤2.5
HGB	110g/L – 180g/L	≤1.0
PLT	≥100 × 10^9 /L	≤4.0
HCT or MCV	30% – 50% (HCT) or 80fL – 100fL (MCV)	≤1.5 (HCT)

INSTRUMENT INTRODUCTION MODEL - UH1180

Detection Technology	Nucleic Acid Fluorescence Staining & Flow Cytometry to count WBC、NRBC and 6-part impedence methed and flowcytometry for RBC/PLT
Detection mode	CBC、DIFF、NRBC、RET、SR
Sample mode	Whole Blood Mode, Low Value Leukocyte Mode, Predilution Mode, and Sample Research Mode
Sample volume	Whole blood mode: 88ul Predilution mode: 70ul
Throughput	CBC+DIFF: 100T/H CBC+DIFF+RET: 83T/H
Reporting parameters (36 in total)	Leukocyte: WBC、NEUT(#,%)、LYMPH(#,%)、MONO(#,%)、EO(#,%)、BASO(#,%)、IG(#,%) Erythrocyte: RBC、HGB、HCT、MCV、MCH、MCHC、RDW-SD、RDW-CV、NRBC(#,%) Platelets: PLT、PDW、MPV、P-LCR、P-LCC、PCT Reticulocytes: RET(#,%)、IRF、LFR、MFR、HFR、RET-He
Auto loader	Up to 50 sample position
Linear range	WBC: 0~500x10^9/L RBC: 0 – 8.60 × 10^{12}/L HGB: 0 – 260g/L PLT: 0~5000x10^9/L

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PLT	⩾100 × 10^9 /L	⩽4.0
HCT or MCV	30% – 50% (HCT) or 80fL – 100fL (MCV)	⩽1.5 (HCT)

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UH 1100

UH 1120

UH 1180

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