# INSTRUMENT INTRODUCTION

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: 0~500×10 <sup>9</sup> /L RBC: 0 - 8.60 × 10 <sup>12</sup> /L HGB: 0 - 260g/L PLT: 0~5000×10 <sup>9</sup> /L

# PRECISION

Parameter	Detection Range	Precision/%
WBC	$\geq$ 3.50 × 10 <sup>9</sup> /L	≤2.5
RBC	≥3.50×10 <sup>12</sup> /L	≤2.5
HGB	110g/L - 180g/L	≤1.0
PLT	≥100×10 <sup>9</sup> /L	≤4.0
HCT or MCV	30% – 50% (HCT) or 80fL – 100fL (MCV)	≤1.5 (HCT)

**NOTICE**: This brochure is for reference purpose only and subject to change without notice.

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# AUTOMATIC HEMATOLOGY ANALYZER SEEING BEYOND LIMIT





## **Principal**

## 3<sup>rd</sup>generation Tech

Fluorescence staining to Nucleic Acid





# Multiple channels





abnormal cells

acid information



FSL (Forward Scattered Light) mainly reflects the size of the cells,

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 fluores-

cent 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

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

SSC (Side Scattered Light) mainly reflects size and number of particle in cells

SFL (Side Fluorescence Light) mainly reflects the concentration of nucleic acid

In FCW channel, WBC, Baso, and NRBCs results will be provided. Baso and NRBCs are generated without extra reagent or cost In FCD channel, F810 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-0) will be provided. PLT-0 can improve the accuracy of low platelet counting



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

## 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, F880 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



F 9000 Automatic Hematology Analysis line test speeed up to 900T/H

Vertical (cabinet) assembly line

## **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