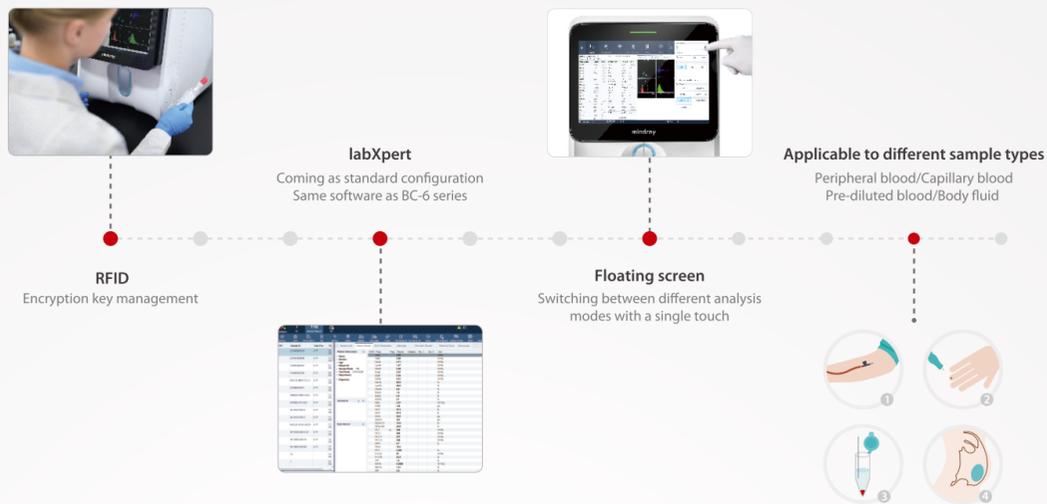


▶ Excellent performance, high reliability, and ease of use



▶ An all-in-one solution that goes above and beyond your expectations



## BC-700

Auto Hematology Analyzer with ESR

### Key Specifications

**Principles**  
 WBC (IMG/Neu/Mon/Lym/Eos/Bas), NRBC, PLT-H/IPF:  
 SF Cube ^ Cell Analysis Technology  
 ^S: Scatter; F: Fluorescence; Cube: 3D analysis

**RBC, PLT**  
 Focusing Flow-DC Impedance Method

**HGB**  
 Colorimetric method

**ESR**  
 Photometric method

**Number of measuring parameters (whole blood): 88**  
**Number of reportable parameters: 33**  
 WBC Bas# Bas% Neu# Neu% Eos# Eos% Lym# Lym% Mon# Mon% IMG# IMG% RBC HGB MCV MCH MCHC RDW-CV RDW-SD HCT NRBC# NRBC% PLT PLT-I PLT-H MPV PDW PCT P-LCR P-LCC IPF ESR  
**Number of research parameters: 54**

**Number of measuring parameters (body fluid): 18**  
**Number of reportable parameters: 7**  
 WBC-BF TC-BF# MN# MN% PMN# PMN% RBC-BF  
**Number of research parameters: 11**

**Sample volume**  
 CD (whole blood): 23ul  
 CD+ESR (whole blood): 160ul  
 Predilute: 20ul

**Data storage capacity**  
 Up to 150,000 results including numeric and graphical information

**Throughput**  
 CD 80t/h CD+ESR 40t/h

Sample Type	Analysis Mode
Whole blood	CBC, CBC + DIFF, CD + ESR, CD/WBC-3X, ESR
Predilute	CBC, CBC + DIFF
Body fluid	CBC + DIFF

## BC-700

Auto Hematology Analyzer with ESR

# Above and Beyond

### Physical Specifications

**Dimensions**  
 500D x 325W x 450H mm

**Weight**  
 ≤35Kg

**Voltage**  
 100V-240V~ (±10%)

**Frequency**  
 50Hz/60Hz (±1Hz)

**Power input**  
 300VA

**External output**  
 LAN x 1, USB x 4 (Specifications: DC 5V; 500mA; USB 2.0 x 3; USB 3.0 x 1)

### Normal Operating Environment

**Ambient temperature:**  
 10°C ~ 35°C

**Relative humidity:**  
 30% ~ 85%

**Atmospheric pressure:**  
 70.0kPa ~ 106.0kPa^  
 ^Note: Required altitude for normal operation:  
 -400m ~ +3000m

### Performance

Parameter	Linearity Range	Precision	Carryover
WBC	0-500x10 <sup>9</sup> /L	≤2.5% (≥4.51x10 <sup>9</sup> /L)	≤ 1.0%
RBC	0-8.60x10 <sup>12</sup> /L	≤1.5% (≥3.5x10 <sup>12</sup> /L)	≤ 1.0%
HGB	0-260g/L	≤1.0% (110-180g/L)	≤ 1.0%
HCT	0-75%	≤1.5% (30%-50%)	≤ 1.0%
PLT*	0-5000x10 <sup>9</sup> /L	≤4.0% (≥100x10 <sup>9</sup> /L)	≤ 1.0%
ESR		≤1.8(SD)(0~20mm/h)	≤ 1.0%



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# BC-700 Auto Hematology Analyzer with ESR

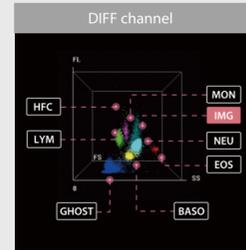
## ••• Above your expectations



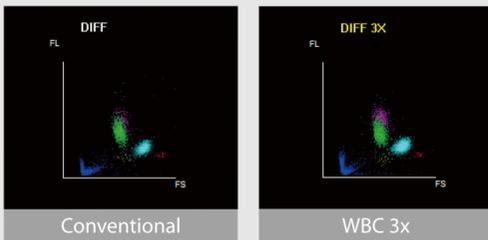
► **SF Cube fluorescent technology allows reliable counting and differentiation of abnormal samples**

### More refined and reliable cell differentiation

3D fluorescent analysis technology allows reliable differentiation of immature and other abnormal cells, such as immature granulocytes (IMGs), and immature platelet fraction (IPF).



### WBC6-Part Differentiation



### More reliable measurements for low-value samples

The BC-700 3D fluorescence analysis platform is designed with multiple counting WBC-3x modes to help ensure higher reliability for low-value WBC samples.

Parameter	Result	Unit	Parameter	Result	Unit
WBC	16.66	10 <sup>9</sup> /L	RBC	4.59	10 <sup>12</sup> /L
Hem	15.90	10 <sup>15</sup> /L	HGB	1.00	g/L
Lymph	0.32	10 <sup>9</sup> /L	HCT	0.362	L
Mon	0.43	10 <sup>9</sup> /L	MCV	72.4	fL
Neu	0.01	10 <sup>9</sup> /L	MCH	21.7	pg
Bas	0.02	10 <sup>9</sup> /L	MCHC	3.00	g/L
MPV	0.43	10 <sup>9</sup> /L	RDW-CV	0.289	%
RDW	0.94	10 <sup>9</sup> /L	RDW-SD	17.7	fL
Lymph%	0.019	%	RET	0.004	10 <sup>12</sup> /L
Mon%	0.026	%	RET%	0.01	%
Bas%	0.001	%	IPF	0.0	%
IPF%	0.006	%	MFR	0.0	%
PLT	84	10 <sup>9</sup> /L	HFR	2.6	%
MPV	10.9	fL	RHE	20.5	fL
PDW	14.8	%	NRBC	0.00	10 <sup>12</sup> /L
PCT	1.31	%	NRBC%	0.00	1000WBC
PLCC	38	10 <sup>9</sup> /L	ESR	5.37	mm/h
PLCR	45.3	%			
IPF	0.7	%			

### More comprehensive alarm messages for abnormalities

The analyzer provides a detailed list of over 37 prompt messages, including WBC message, RBC message, and PLT message. This allows laboratory technicians to intuitively and quickly identify abnormal samples and proceed further with the samples in a timely manner. This in turn helps to avoid missed diagnosis of blood disease and false reports.

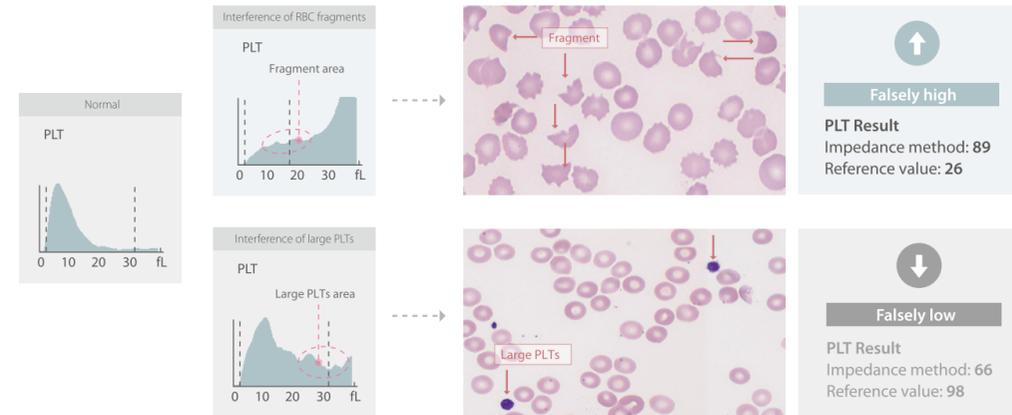
# BC-700 Auto Hematology Analyzer with ESR

## ••• Beyond your expectations



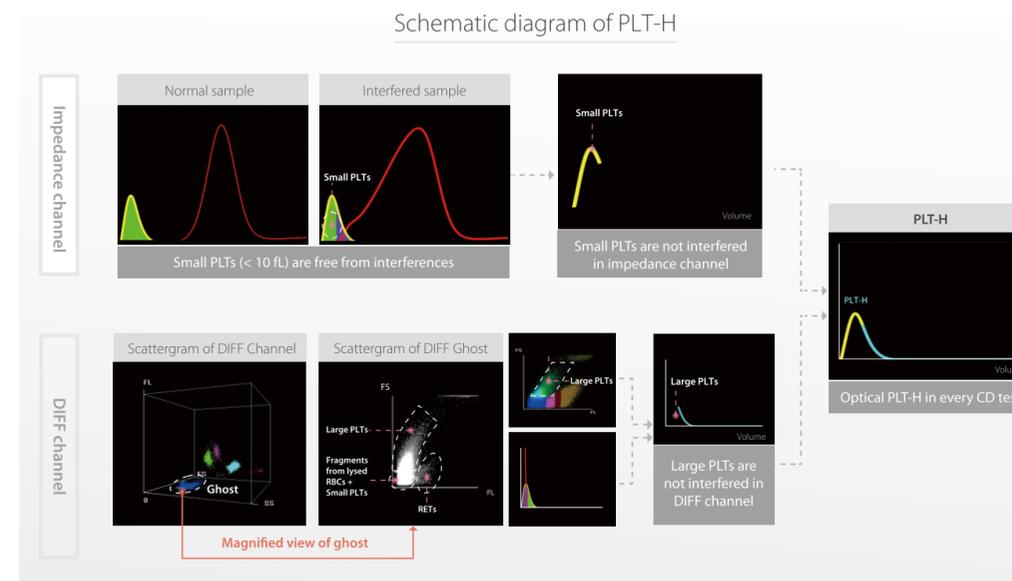
► **Limitations of traditional PLT counting**

In the traditional impedance method, PLTs are subject to interferences that may lead to falsely high or falsely low results (as shown in the figure). Once an error report is generated, it will directly affect the judgment and decision-making of clinicians. The results reported at the clinical decision level are related to patient safety. Therefore, accurate PLT results are critical in clinical practice.



### Optical PLT-H in every CD test

In order to solve the above problem, we have developed a brand new parameter PLT-H. It combines small PLTs from the conventional impedance method and large PLTs from the optical method. The solution can resist the interferences in conventional PLT detection without requiring extra reagents.



## CD + ESR in one test provide reliable ESR results with greater ease

The BC-700 series integrates an automatic ESR module in a hematology analyzer. It can also generate both CBC & ESR results in one test within 1.5 min. In addition, it saves the costs that would otherwise be incurred for the purchase, maintenance, consumables, and storage space of a separate ESR analyzer. Compared with the traditional Westergren method, this method performs better in quality traceability, repeatability, speed, safety, and level of automation.

### Accurate

- Great correlation with the Westergren method
- Same QC and calibrator as in the BC-6000 series
- Combined examination helps to avoid the interferences of dehydration, polycythemia vera and anemia on ESR results;

### Cost-effective

- The integrated instrument is capable of both CBC and ESR detection;
- Takes up the space of only one analyzer.

### Automatic

- Report CBC + ESR results together within 1.5 min;
- The measurement results are protected against the influence of subjective factors;
- Automation can reduce the biosafety hazards that may otherwise be introduced by a manual method.