

# ABX Micros ES 60

Process efficiency in Hematology



# ABX Micros ES 60

Hematology analyzer

A new generation hematology analyzer based on the Micros concept,  
universally recognized for its reliability, robustness and high quality results



Closed tube version

- **60 samples per hour (OT Version)**
- **CBC + 3 DIFF (16 parameters)**
- **Large color touch screen**
- **Comprehensive quality control program**



#### ◀ Integrated barcode reader\*

Secured identification (patient,  
QC and reagent lot numbers)

\*Available in closed tube version  
(optional external barcode  
reader for open tube version)



#### ◀ Integrated ticket printer

. Full data print-out  
. PLT, RBC, and WBC curves



#### ◀ USB connection

- . Archiving patients and QC results
- . Downloading QC target values



#### ◀ Unique pack system

- . Innovative ABX patent
- . Ready to use
- . Optimized packaging
- . Simplify your lab organisation

## ABX Micros Concept “Zero maintenance” system

- > **ABX Micro-sampling**  
Only 10µl of whole blood per analysis
- > **ABX Liquid valves**  
Precise volume and reliability
- > **ABX stepper motor vacuum pump**  
Noiseless running (no-compressor)

# More Powerful, More Intuitive, More Secured, More Connectivity...

The perfect combination of intuitive use and innovative technologies

- **User friendly interface with rapid access to all menus and virtual keyboard**
- **User profile management with different access levels**
- **Flexible data exchange for patient results and quality control**
- **Multi-connection capability (network and peripherals)**

## Easy interpretation ▶

Control all the parameters from the main screen  
Access to detailed results (normal ranges and curves)

1000 patient results capacity  
Unlimited patient report archiving (external viewer)  
Customized reporting format



## Comprehensive quality control program ▶

3 simultaneous activated blood control levels  
Levey-Jennings graphics  
XB management  
Upload / Download control information



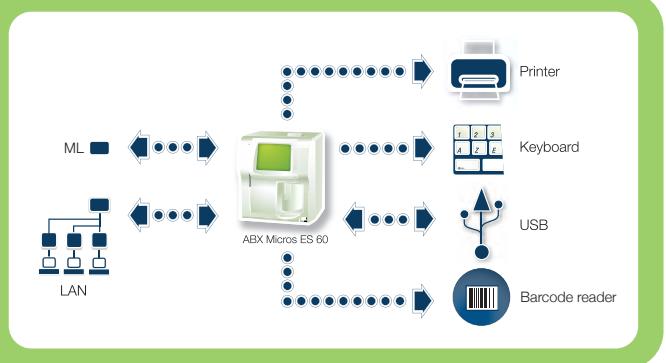
## Automatic system monitoring ▶

Real-time instrument status with help messages  
Automatic reagent test count down  
Automatic daily maintenance and operational alerts  
Complete traceability in compliance with accreditation standards  
(users, reagents, controls, maintenance...)



## Full Connectivity Integrated Technologies

- > **Software**  
Java™, Linux Operating System, HTML
- > **Hardware: 7 connections ports**  
RS232 (2), USB (3), PS2 (1), RJ45 (1)
- > **ABX and ASTM protocols available**
- > **HL7 Protocol for EMR**



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## PHYSICAL SPECIFICATIONS

- Dimensions & Weight:

Height	Width	Depth	Weight
16.9 in 43 cm	14.2 in 36 cm	14.2 in 36 cm	30.9 lb 16 kg

- Throughput\*:

OT: 60 samples/hour

CT: 50 samples/hour

\* Throughput performance is reachable in optimized conditions with an admitted margin for variation of 10%.

- Sound Pressure Level:

< 60 dBA

- Operating Temperature & Humidity:

16 to 30°C (61 to 86°F) room temperature.

Maximum relative humidity 85% for temperature up to 30°C (86°F)

- Specimen Volume:

CBC + 3 part DIFF 10 µL

- Power Requirements:

Power supply from 100 V to 240 V (± 10%)  
50 Hz to 60 Hz

Power consumption Maximum 110 VA

- Reagents:

- ABX Minipack LMG
- ABX Minidil LMG
- ABX Minilyse LMG
- ABX Miniclean
- ABX Alphalyse 360 (0,36L)

## METHODS & TECHNOLOGIES

- RBC/PLT Detection Principles

Method	Impedance
Ruby diameter	50 µm
Depression of count	200 mb
Duration of count	2 (or 3) x 6 seconds
Dilution ratio	1/15 000

- HGB Measurement

Method	Photometry
Wavelength	550 nm
Dilution ratio	1/250

- HCT Measurement

Method	Numeric integration
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- WBC Measurement

Method	Impedance
Ruby diameter	80 µm
Depression of count	200 mb
Duration of count	2 (or 3) x 6 seconds
Dilution ratio	1/260

- 3 Part Differentiation

Method	Impedance + specific lyse action
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- MCV, MCH, MCHC, RDW

Calculation

## SOFTWARE SPECIFICATIONS

- 8.4" LCD screen

256,000 colors, 640 x 480 pixel resolution

Inverter card for LCD screen

Touch screen technology

Secure digital memory card: 512 Mo

58mm thermal printer with rapid paper loading

Linux Operating System

## PARAMETERS & PERFORMANCE DATA

- 16 Parameters:

WBC	RBC	MCH	PLT
LYM# & LYM%	HGB	MCHC	MPV
MON# & MON%	HCT	RDW	
GRA# & GRA%	MCV		

- Linearity:

Parameter	Linearity Limit	Visible Range
WBC	0.0 - 100 x 10 <sup>3</sup> /mm <sup>3</sup>	100 - 150 x 10 <sup>3</sup> /mm <sup>3</sup>
RBC	0.0 - 8 x 10 <sup>6</sup> /mm <sup>3</sup>	8 - 18 x 10 <sup>6</sup> /mm <sup>3</sup>
HGB	0.0 - 24 g/dL	26 - 30 g/dL
HCT	0.0 - 70 %	80 - 90%
PLT (Whole blood)	0 - 2200 x 10 <sup>3</sup> /mm <sup>3</sup>	2200 - 6000 x 10 <sup>3</sup> /mm <sup>3</sup>

- Precision:

Parameters	%CV	Range
WBC	<2.5	4-10.0 x 10 <sup>3</sup> /µL
RBC	<2.0	4-7 x 10 <sup>6</sup> /µL
HGB	<1.5	12-18 g/dL
HCT	<2.0	36-54%
PLT	<5.0	200-500 x 10 <sup>3</sup> /µL

- Carry-over:

WBC	<1%
RBC	<1%
HGB	<1%
PLT	<1%

## CERTIFICATIONS

EN 61326: 2001  
EN 61326-2-6: 2006  
IEC 61010-1: 2001  
IEC 61010-2-81: 2001 / A1: 2003  
IEC 61010-2-101: 2002  
UL61010-1: 2004  
C22.2 N°61010-1: 2004  
In Vitro Diagnostics Directive: 98/79/EC  
cTUVus mark

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