

# ABXMicrosES 60

Hematology analyzer



## PHYSICAL SPECIFICATIONS

**Dimensions & Weight:**

Height	Width	Depth	Weight OT	Weight CT
16.9 in	14.2 in	14.2 in	30.9 lbs	35.7 lbs
43 cm	36 cm	36 cm	14 kg	17 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:**

< 53 dB

**Operating Temperature & Humidity:**

Capable of operating at ambient temperature (16-30° C)\*

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

\*according to CLSI guidelines

**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 100 VA (-30%, +10%)

**Reagents:**

- ABX Minidil LMG (10L or 20L)

- ABX Minilyse LMG (1L)

- ABX Miniclean (1L)

- ABX Minocclair (0.5L)

- ABX Cleaner (0.5L)

## METHODS & TECHNOLOGIES

**RBC/PLT Detection Principles**

Method	Impedance
Ruby aperture 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	1/260

**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-CV, RDW-SD\*, PCT\*, PDW\*

Calculation

## SOFTWARE

8.4" LCD screen

256,000 colors, 640 x 480 pixel resolution

Touch screen technology

Secure digital memory card: 512 Mb

58mm thermal printer with rapid paper loading

Linux Operating System

Automatic clog removal facilities

Automatic cleaning of probe after every test

Data storage of 1000 (expandable upto 50000) samples with histograms

## PARAMETERS & PERFORMANCE DATA

**22 Parameters:**

WBC	RBC	MCH	PDW-CV*	P-LCC
LYM# & LYM%	HGB	MCHC	PLT	P-LCR
MON# & MON%	HCT	RDW-SD*	MPV	GLR
GRA# & GRA%	MCV	RDW-CV	PCT*	

**Linearity:**

Parameter	Linearity Limit	Visible Range
WBC	0 - 100 x 10 <sup>9</sup> /mm <sup>3</sup>	100 - 150 x 10 <sup>9</sup> /mm <sup>3</sup>
RBC	0 - 8 x 10 <sup>9</sup> /mm <sup>3</sup>	8 - 18 x 10 <sup>9</sup> /mm <sup>3</sup>
HGB	0 - 26 g/dL	26 - 30 g/dL
HCT	0 - 80 %	80 - 90%
PLT (Whole blood)	0 - 2200 x 10 <sup>9</sup> /mm <sup>3</sup>	2200 - 6000 x 10 <sup>9</sup> /mm <sup>3</sup>
PLT (PLT concentrate)	0 - 4000 x 10 <sup>9</sup> /mm <sup>3</sup>	4000 - 6000 x 10 <sup>9</sup> /mm <sup>3</sup>

**Precision:**

Parameters	%CV	Range
WBC	<2.5	4-10.0 x 10 <sup>9</sup> /µL
RBC	<2.0	4-7 x 10 <sup>9</sup> /µL
HGB	<1.5	12-18 g/dl
HCT	<2.0	36-54%
PLT	<5.0	200-500 x 10 <sup>9</sup> /µL

**Carry-over:**

WBC	<2%
RBC	<2%
HGB	<2%
HCT	<2%
PLT	<2%

\* RUO parameters (Research Use Only)

## CERTIFICATION

EN 61326-1:2006  
 EN 61326-2-6:2006  
 IEC 61010-1:2010  
 IEC 61010-2-081:2001 + A1  
 IEC 61010-2-101:2002  
 UL 61010-1:2012  
 CAN/CSA - C22.2 N.61010-1-12  
 CAN/CSA - C22.2 N.61010-2-081-04  
 CAN/CSA - C22.2 N.61010-2-101-04

**HORIBA**  
 Medical

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Operating IMS



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# ABX Micros ES 60

An Indian Pathology adapted Analyzer

- Advanced PAMS Technology
- Real Time Reagent Management
- Comprehensive Erythrocyte Indices
- HL-7 Compatibility
- QC Flexibility



Subject to modifications / Ref. SAP: 1300034557 / © 2017 HORIBA Medical - HORIBA ABX SAS - France - RCS Montpellier 328 031 042 (02/2017)

# ABX Micros ES 60

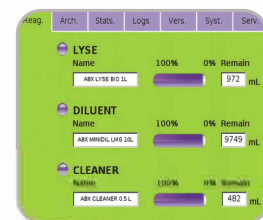
## The Gold Standard

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



- 60 samples per hour (OT Version)
- CBC + 3 DIFF (22 parameters)
- Large color touch screen
- Comprehensive quality control program
- New cyanide free lyse reagent
- Fully automated startup and shutdown
- Enhanced Flags and Alarms

Open tube version  
(Compatible with some closed tubes)



### Real time reagent management

- . Live reagent status



### Integrated ticket printer

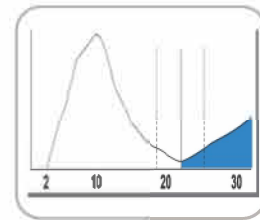
- . Full data print-out
- . PLT, RBC, and WBC curves

(optional external printer in closed tube and open tube versions)



### USB connection

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



### Advanced PAMS technology

- . Advance PAMS technology (Platelet Aggregate Managements Systems)
- . Accurate platelet counting by distinguishing PLT and microcytes

## ABX Micros Concept

### "Zero maintenance" system

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

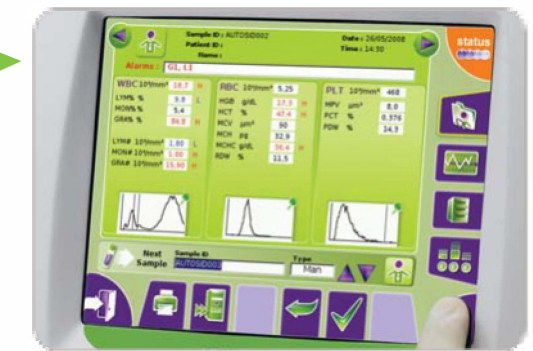
## More Powerful, More Intuitive, More Secured, More Connectivity...

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)

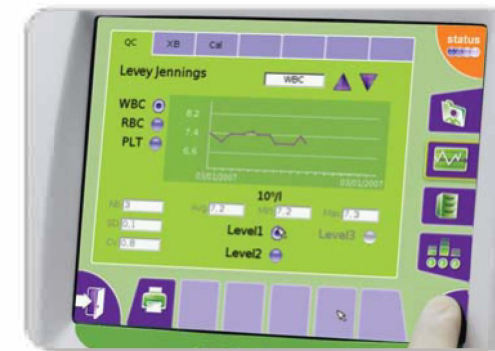
### Easy interpretation

- Control all the parameters from the main screen
- Access to detailed results (normal ranges and curves)
- 1000 patients 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
- Import the 3 QC levels data in one time
- Overlapping QC capabilities (2 active lots)



### 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



## Full Connectivity Integrated Technologies

- **Software**  
Java™, Linux Operating System, HTML
- **Hardware: 6 connections ports**  
RS232 (2), USB (3 & optional upto 6), RJ45 (1)
- **ABX, ASTM and HL7 protocols available**

