

## ABX Micros ES 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:

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 100 VA (-30%, +10%)

#### Reagents:

- ABX Minidil LMG (10L or 20L)
- ABX Minilyse LMG (1L)
- ABX Miniclean (1L)
- ABX Minoclar (0.5L)
- ABX Cleaner (0.5L)
- Minilysebio (0,4 and 1L)

### 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 aperture 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

MCV, MCH, MCHC, RDW-CV, RDW-SD\*, PCT\*, PDW\* Calculation

### SOFTWARE

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 Mb  
58mm thermal printer with rapid paper loading  
Linux Operating System

### PARAMETERS & PERFORMANCE DATA

#### 19 Parameters:

WBC	RBC	MCH	PDW*
LYM# & LYM%	HGB	MCHC	PLT
MON# & MON%	HCT	RDW-SD*	MPV
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>6</sup> /mm <sup>3</sup>	8 - 18 x 10 <sup>6</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>6</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  
IVD: 98/79/EC



HORIBA India Private Limited

246, Okhla Industrial Estate Phase III, New Delhi - 110020, India, Tel: +91 (11) 4646 5000 / 4669 5001 Fax :+91 (11) 4646 5020 / 4669 5010  
http://www.horiba.com, Toll Free No. 1800-103-4470, E-mail: pentramicros.hin@horiba.com

FRANCE +33 (0)4 67 14 15 15 - ITALY +39 / 06 51 59 22 1 - SPAIN +34 / 91- 353 30 10 - PORTUGAL +351 / 2 14 72 17 70 - UK +44 (0) 1604 542650  
POLAND +48 / 22 30 05 460 - USA +1 / 949 453 0500 - BRAZIL +55 / 11 2923-5439 - THAILAND +66 / 2 861 59 95 - CHINA +86 / 21 3222 1818  
INDIA +91 / 11 4646 5000 - GERMANY AXON LAB AG +49 / 7153 92260 - DISTRIBUTORS NETWORK +33 (0)4 67 14 15 15  
HORIBA Medical online : http://www.horiba.com/medical



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# ABX Micros ES 60

The global analyzer for Indian pathologies



**Advanced PAMS technology**  
**Real time reagent Management**  
**Comprehensive erythrocyte indices**  
**HLM-7 compatibility**  
**QC flexibility**

# ABX Micros ES 60

## The Gold Standard

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

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

The perfect combination of intuitive use and innovative technologies



- 60 samples per hour (OT Version)
- CBC + 3 DIFF (19 parameters)
- Large color touch screen
- Comprehensive quality control program
- New cyanide free lyse reagent

Open tube version  
(Compatible with some closed tubes)

- 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

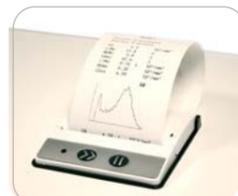
Control all the parameters from the main screen  
Access to detailed results (normal ranges and curves)  
1000 patients results capacity  
Unlimited patient report archiving (external viewer)  
Customized reporting format



### Integrated barcode reader\*

- . Secured identification (patient, QC and reagent lot numbers)
- . Compatible with ISBT128 barcodes

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



### Integrated ticket printer

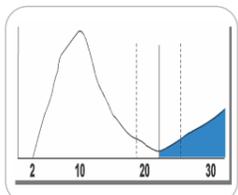
- . Full data print-out
- . PLT, RBC, and WBC curves

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



### USB connection

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



### Advanced PAMS technology

- . Platelet Aggregate Management System
- . Accurate Platelet counting by distinguishing PLT and Microcytes

### 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  
(users, reagents, controls, maintenance...)



## 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)

## Full Connectivity Integrated Technologies

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

