

ABX **Micros ES** 60

Process efficiency in Hematology



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



Closed tube version
(Compatible with some open tubes)

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



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

◀ Integrated barcode reader*

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



◀ 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

⇨ Micro-sampling

Only 10µl of whole blood per analysis

⇨ Liquid valves

Precise volume and reliability

⇨ Stepper motor vacuum pump

Noiseless running (no-compressor)

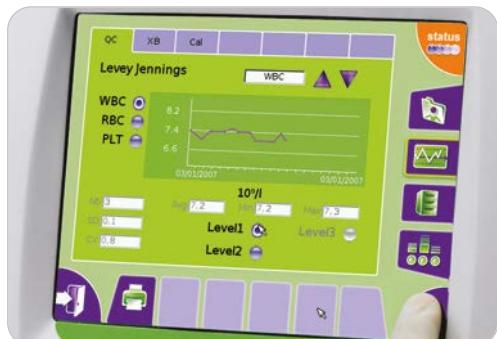
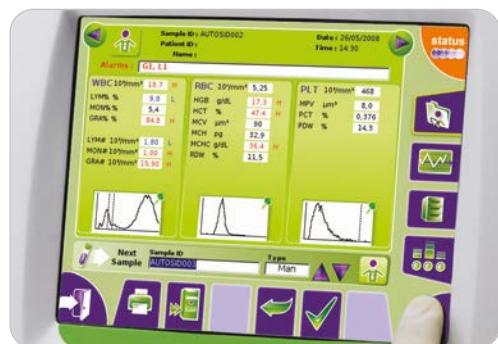
More Powerful, More Intuitive, More Secured, More Connectivity...

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

Full Connectivity Integrated Technologies

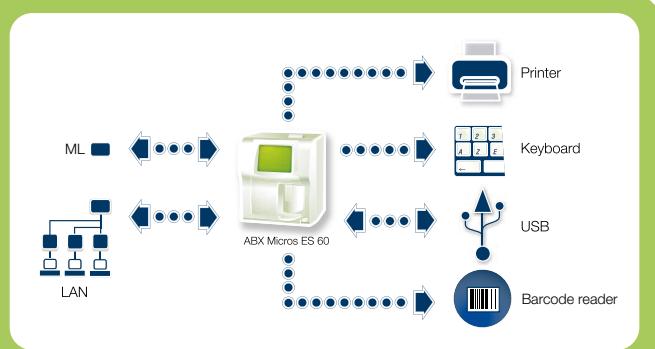
⇒ Software

Java™, Linux Operating System, HTML

⇒ Hardware: 6 connections ports

RS232 (2), USB (3), RJ45 (1)

⇒ ABX, ASTM and HL7 protocols available



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 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 ($\pm 10\%$)
	50 Hz to 60 Hz
Power consumption	100 VA (-30%, +10%)

Reagents:

- ABX Minipack LMG
- ABX Minidil LMG (10L or 20L)
- ABX Minilyse LMG (1L)
- ABX Miniclean (1L)
- ABX Alphalyse 360 (0,36L)
- ABX Alphalyse (0,4 L)
- ABX Minoclair (0,5L)
- ABX Cleaner (0,5L)
- Minilysebio (0,4 and 1L)

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	1/260

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

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

19 Parameters:

WBC	RBC	MCH	PDW*
LYM# & LYMP%	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 ⁹ /mm ³	100 - 150 x 10 ⁹ /mm ³
RBC	0 - 8 x 10 ⁹ /mm ³	8 - 18 x 10 ⁹ /mm ³
HGB	0 - 26 g/dL	26 - 30 g/dL
HCT	0 - 80 %	80 - 90 %
PLT (Whole blood)	0 - 2200 x 10 ⁹ /mm ³	2200 - 6000 x 10 ⁹ /mm ³
PLT (PLT concentrate)	0 - 4000 x 10 ⁹ /mm ³	4000 - 6000 x 10 ⁹ /mm ³

Precision:

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



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