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.

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

**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)

**Integrated barcode reader**
Secured identification (patient, QC and reagent lot numbers)

**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

Closed tube version

*Available in closed tube version (optional external barcode reader for open tube version)
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
ABX Micros ES 60
Process efficiency in Hematology

PHYSICAL SPECIFICATIONS

- Dimensions & Weight:
<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.9 in</td>
<td>14.2 in</td>
<td>14.2 in</td>
<td>30.9 lb</td>
</tr>
<tr>
<td>43 cm</td>
<td>36 cm</td>
<td>36 cm</td>
<td>16 kg</td>
</tr>
</tbody>
</table>

- 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%)
  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

- 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

- MCV, MCH, MCHC, RDW Calculations

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 Mb
- 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 10^3/mm³ | 100 - 150 x 10^3/mm³
  RBC       | 0.0 - 8 x 10^6/mm³  | 8 - 18 x 10^6/mm³
  HGB       | 0.0 - 24 g/dL       | 26 - 30 g/dL
  HCT       | 0.0 - 70 %          | 80 - 90 %
  PLT (Whole blood) | 0 - 2200 x 10^3/mm³ | 2200 - 6000 x 10^3/mm³

- Precision:
  Parameters | %CV Range | Range
  WBC        | <2.5       | 4-10.0 x 10^3/µL
  RBC        | <2.0       | 4-7 x 10^3/µL
  HGB        | <1.5       | 12-18 g/dL
  HCT        | <2.0       | 36-54%
  PLT        | <5.0       | 200-500 x 10^3/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 61010-2-101: 2002
- UL61010-1: 2004
- C22.2 N°61010-1: 2004
- In Vitro Diagnostics Directive: 98/79/EC
- cTUVus mark

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