

Abacus 380

3-PART WBC DIFFERENTIAL
ANALYZER



ANALYZER OVERVIEW

The Abacus 380 is a compact, bench top, 3-part WBC differential analyzer with a sample throughput of 80 tests/hour making it our fastest analyzer today. The Abacus 380 is operated via a color touch screen and an easy to follow,

intuitive icon user interface. With all its features and small footprint, the system is ideal for laboratories, clinics and physician practices that are looking for a reliable, safe, accurate and easy to use instrument.

BENEFITS AND KEY FEATURES

Accurate and Precise results

- Proven impedance measurement technology with advanced flagging algorithms
- Clog detection and prevention with automatic system cleaning processes
- Comprehensive 22 parameters CBC with 3 histograms

User friendly and easy to operate

- Easy to use high resolution touch screen with multi-language menu
- Recording of sample and quality control information is fast and efficient
- 4 USB ports allow simple connection with external devices such as a host computer or an external printer
- Advanced software package providing comprehensive QC statistics

Operator safety

- Unique sample rotor that reduces the risk of biohazard exposure
- Self-cleaning procedures minimize daily maintenance

Confidence

- System uses easy to understand warning messages and sample flags
- Designed to use specific Diatron reagents to deliver the highest quality results



Abacus 380

DIATRON REAGENTS

Our systems comprise of two perfectly matched elements: analyzers and reagents. The optimum performance of our analyzer systems is only achieved when our matched reagents are used. Our ISO 13485 certified reagent manufacturing plant is designed to ensure the highest quality standards. All lots of reagent we manufacture are fully validated prior to release on each of our associated instruments for low background counts, osmolality, pH and other critical parameters. Our diluent reagents contain no azide and our lyse reagents are cyanide free. Our highly stable reagents offer a shelf life of up to 36 months from the date of manufacture and up to 120 days of on-board stability. The combination of Diatron reagents and Diatron analyzers together ensure the best system performance and quality of results.



SID		Human	
WBC	6.43 $10^9/l$	RBC	4.77 $10^{12}/l$
LYM	2.52 $10^9/l$	HGB	147 g/l
MID	0.32 $10^9/l$	HCT	43.41 %
GRA	3.59 $10^9/l$	MCV	91 fl
LYM%	39.2 %	MCH	30.8 pg
MID%	5.0 %	MCHC	15.8 %
GRA%	55.8 %	RDWc	166 $10^9/l$
		PLT	0.17 %
		PCT	10.2 fl
		MPV	39.6 %
		PDWc	

SPECIFICATIONS

MEASURING DATA

- Throughput: 80 tests/hour
- Parameters: 22 hematology parameters, including 3-part differential: WBC, LYM, MID, GRA, LYM%, MID%, GRA%, RBC, HCT, MCV, HGB, MCH, MCHC, PLT, PCT, MPV, P-LCC, P-LCR, RDW-CV, RDW-SD, PDW-CV, PDW-SD

MEASURING PRINCIPLE

- Volumetric impedance method
- Light absorbance for HGB measurement

REAGENTS AND SAMPLING SYSTEM

Samples

- Sample volume: 25 µl of whole blood in normal 3-part mode, 50 µl of pre-diluted blood
- Sampling method: open tube system
- Calibration: manual or automatic

Reagents

- Environmentally friendly bulk Diluent and Cleaner reagents and cyanide-free Lyse reagent

QUALITY CONTROL

- Separate QC database
- Levey-Jennings graphs

MEASUREMENT

- 2 counting chambers
- Aperture diameter: 70 µm (RBC/PLT) and 100 µm (WBC)

TECHNICAL FEATURES

- Data capacity: 10,000 results
- Host computer interface: USB B port
- Data back-up method: USB mass storage device
- Printer interface: USB with support for HP printers
- Built-in thermal printer module, 56 mm wide roll paper
- Display: 320 x 240 dots, high-contrast, backlit, color graphics LCD (liquid crystal display)
- External keyboard, USB keyboard
- Power requirement: 12V DC, 5 A, 60 W max.

USAGE

- User interface: Easy-to-use, menu driven with touch screen, separate START button and status LED
- User languages: English, Indonesian, German, Italian, French, Czech, Portuguese, Polish, Spanish, Vietnamese, Russian, Greek, Hungarian

DIMENSIONS

- Size (Width x Depth x Height):
33 cm x 31 cm x 38 cm
13" x 10" x 15"
- Weight: 12 kg, 26 lbs

Reagents for Abacus 380

SAP Cat. No	Cat. No.	Product name	Pack size
10023037	D1012	Diatro•Dil-Diff	20 l
10023114	D2011HK	Diatro•Lyse-Diff with Hardware Key	1 l
10023233	D5011	Diatro•Cleaner*	1 l

Cleaners for tube decontamination

SAP Cat. No	Cat. No.	Product name	Pack size
10023273	D6011	Diatro•Clenz*	1 l
10023287	D7011	Diatro•Hypoclean	1 l
10023301	D8011	Diatro•Hypoclean CC	100 ml

Analyzer

Description	Catalogue No	SAP Cat. No
Abacus 380	A38-1	10021729

* Other sizes of reagents are available:
Diatro•Cleaner 5 l 10023253 (D5015)
Diatro•Clenz 5 l 10023279 (D6015)

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This product is not currently cleared for sale in the USA and only available in non-US markets.

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