



Abacus 5

Walk-away intelligence



Abacus 5

Analyzer Overview

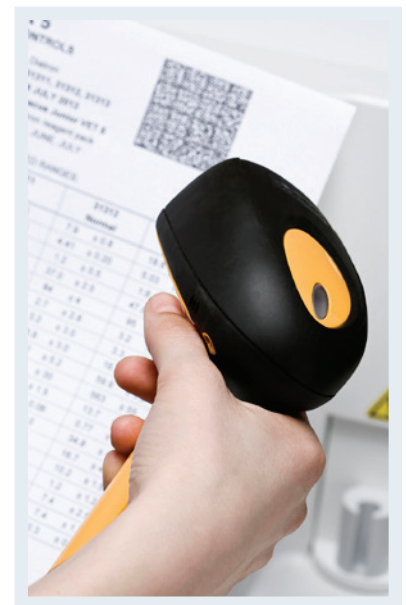
The Abacus 5 system is a compact, bench top, **60 test/hour, 5-part laser WBC differential analyzer** with two **sampling modes**: a cap piercing mode for closed tube sampling and another for open tubes. The Abacus 5 can be enhanced to meet your changing needs by adding an **autosampler** and / or a **small sample volume module**. The Abacus 5 has a large color touch screen with an **easy to follow, intuitive icon user interface**. This system is an ideal solution for most hospitals, laboratories and satellite clinics that look for more advanced technology, **reliable, safe, accurate and easy to use** instrumentation.

Key Features and Benefits

- **Accurate and Precise results**
 - Proven impedance measurement technology with advanced flagging algorithms
 - Patented optical laser based WBC differential technology
 - Clog detection and prevention with automatic system cleaning processes
 - Advanced sample aspiration flagging checks
- **Field upgradeable with autosampler and small sample volume modules**
- **User friendly and easy to operate**
 - Uses a high resolution touch screen with easy to follow internationally recognized icons
 - Recording sample and quality control information is fast and efficient
 - Information can be uploaded from a USB, QR code or via a bi-directional LIS connection
 - Printing of results does not stop the measuring process. Print format can be customized
 - Advanced software statistics provide comprehensive graphical QC analysis
- **Operator safety**
 - Autosampler and Cap piercing mode validated for several sample tube types e.g. Monovette, Vacutainer, Vacuette plus BD MAP tube if small sample module fitted
 - Self-cleaning procedures minimize daily maintenance
 - Reduced risk of biohazard exposure
- **Confidence**
 - System uses easy to understand warning messages and sample flags
 - Employs a comprehensive QC SW package
 - Offers (3 levels) of user access rights/authority levels
 - Automatically manages on-board reagent status and lot/expiration dates
 - Designed to use specific Diatron reagents to deliver the highest quality results

Diatron Reagents

Our systems comprise of **two perfectly matched elements: analyzers and reagents**. The development of our analyzer systems was only achieved with its matched reagents. 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.



Reagents for Abacus 5

Cat. No.	Product name	Pack size
D1512	Diatro Dil 5P	20l
D3015HK	Diatro Lyse 5P with Hardware Key	5l
D3021	Diatro Diff 5P	1l
D8011	Diatro Hypoclean CC	100ml

Measuring data

- Throughput - 60 tests/hour
- Parameters - CBC+5 DIFF mode, 2 histograms: RBC, PLT, 2 scattergrams: 4 diff, BASO, 26 parameters: WBC, LYM, MON, NEU, EOS, BAS, LYM%, MON%, NEU%, EOS%, BAS%, RBC, HCT, MCV, RDW-sd, RDW-cv, HGB, MCH, MCHC, PLT, PCT, MPV, PDW-sd, PDW-cv, P-LCC, P-LCR

Measuring principle

- Laser light scatter technology for 5-part WBC differential
- Impedance method for CBC: WBC (80 µm), RBC and PLT (70 µm)
- Light absorbance for HGB measurement

Reagents and Sampling System

Samples

- Sample volume - 110 µl of whole blood
- Closed and open tube sampling, optional autosampler
- Calibration - Stat & Autosampler mode, specific control material (external reference - optional)
- Pre-dilute software option for small samples

Reagents

- Environmentally friendly Diluent & Cleaner reagents and cyanide-free Lyse

Quality control

- Separate QC database
- Levey-Jennings graphs

Technical features

- Multuser mode- Multilevel user modes with individual identification (username, password)
- Data storage capacity - 100,000 records
- Printout - External, Microsoft Windows compatible printers
- External keyboard - PS/2 or USB
- Interfacing capabilities - RS232, USB, Ethernet
- Software upgrade - via USB port (USB memory stick)
- Operating environment - Temperature: 15-30°C
- Relative humidity - max 80% (non-condensing)

Usage

- User interface - 600 x 800 color graphics LCD touch screen (10.4")
- Multilingual user interface English, French, Spanish, Croatian, Hungarian, Italian, Polish, Portuguese, Russian, Turkish, Chinese, German, Greek

Dimensions

- Size (Width x Depth x Height)
40 cm x 50 cm x 45 cm
16 in x 20 in x 18 in
- Weight: 35 kg, 77 lbs

Options

Autosampler

- Sample capacity -100 tubes: 10 racks with 10 sample tubes each
- Acceptable primary tubes - Monovette, Vacutainer, Vacuette
- Built-in barcode reader
- Built-in sample mixer
- Cap recognition (only capped tubes are mixed and processed)
- Size (Width x Depth x Height):
30 cm x 30 cm x 18 cm
12 in x 12 in x 7 in
- Weight: 10 kg, 22 lbs

Small sample module

- Abacus 5 with SSM module - Cat No. A5SSM-1
- Aspirated sample only 25µl (standard 110µl)
- The module can either be added during manufacture or retro-fitted to analyzers already in the field.

Your distributor

Description	Catalogue No
Abacus 5 with sample tube cap piercing	A5-1
Abacus 5 with Autosampler module	A5AS-1
Abacus 5 with Small Sample Volume module	A5SSM-1
Small Sample Volume module - Upgrade kit (for units manufactured before 5/13)	A5SSM-Kit
Small Sample Volume module - Upgrade kit (for units manufactured after 4/13)	A5SSM01-Kit
Autosampler module - Upgrade kit (100 tube capacity continuous loading module)	AS5-1

Abacus 5 is available for sale in all markets-US and non-US.

A5 Small Sample Volume module is not currently cleared for sale in the USA and only available in non-US markets.

Diatron reserves the right to change any of the specifications without prior notice. Version Nr. A5150622V3



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