

diatron●●

# Abacus 5

5-PART LASER WBC  
DIFFERENTIAL ANALYZER



# 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. This system is an ideal solution for most hospitals, laboratories and satellite clinics that are looking for more advanced technology which is reliable, safe, accurate and easy to use.

## BENEFITS AND KEY FEATURES

### ACCURATE AND PRECISE RESULTS

- Proven impedance measurement technology
- Patented optical laser based WBC differential technology
- Clog detection and prevention with automatic system cleaning
- Advanced sample aspiration flagging checks

### FIELD UPGRADEABLE OPTIONS

- Autosampler for walk-away capability
- Small Sample Module\*\* for reduced sample volume requirement

### USER FRIENDLY AND EASY TO OPERATE

- High resolution touch screen
- 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

### OPERATOR SAFETY

- Cap piercing mode validated for several sample tube types e.g. Monovette, Vacutainer, Vacuette
- BD MAP tube can be used if small sample module fitted
- Self-cleaning minimizes daily maintenance
- Reduced risk of biohazard exposure

### CONFIDENCE

- Simple warning messages and sample flags
- On-board comprehensive QC SW package
- Offers (3 levels) of user access rights / authority levels
- Automatically manages on-board reagent status and lot / expiration dates

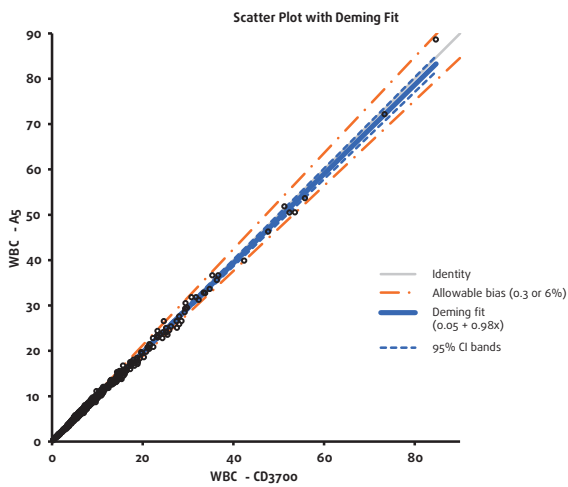
### SPECIFICALLY MATCHED REAGENTS

- Designed to use specific Diatron reagents to deliver the highest quality results
- Maximum shelf life of 36 months with up to 120 day on-board stability

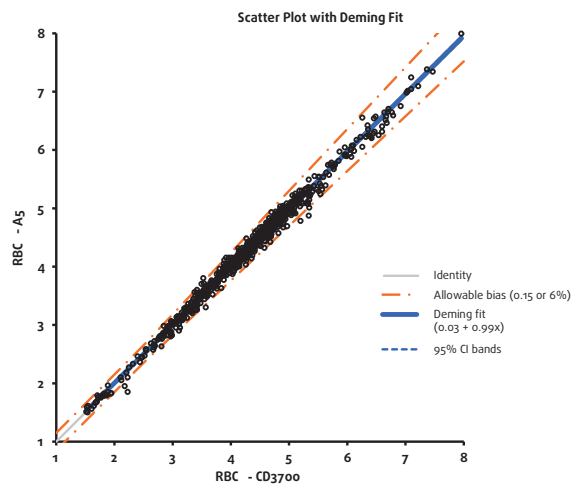
\*\* Only available in non US markets

# Abacus 5

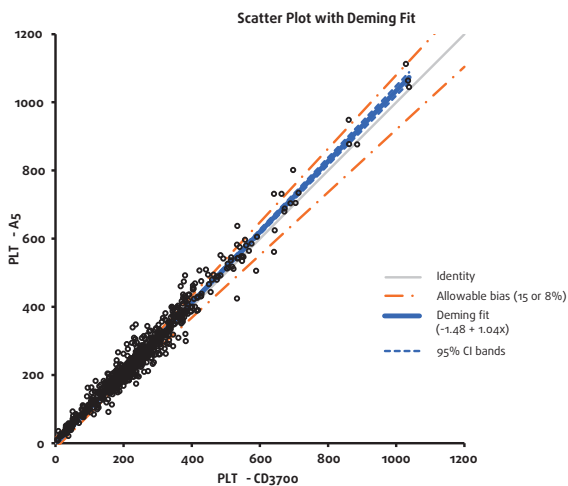
Comparative study data with leading commercial analyzer from three independent laboratories



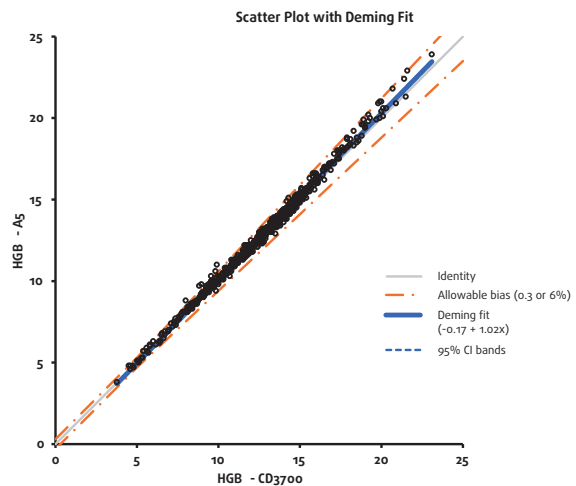
WBC



RBC



PLT



HGB

Additional clinical performance data is available in the A5 case history study.  
Please ask your distributor or contact Diatron ([www.diatron.com](http://www.diatron.com)) for further information.

# SPECIFICATIONS

## 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
- Impedance method for CBC
- Light absorbance for HGB measurement

## REAGENTS AND SAMPLING SYSTEM

### Samples

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

### Reagents

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

## QUALITY CONTROL

- Separate QC database
- Levey-Jennings graphs

## TECHNICAL FEATURES

- Multilevel user modes with individual identification
- Data storage capacity: 100,000 records
- Printout: External printers

## USAGE

- User interface: 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" x 20" x 18"
- Weight: 35 kg, 77 lbs

## OPTIONS

### Autosampler

- Sample capacity: 100 tubes with continuous loading
- Acceptable primary tubes - Greiner, Monovette, Terumo, Vacuette, Vacutainer
- Built-in barcode reader and sample mixer
- Cap recognition

### Small sample module \*

- Aspirated sample only 25 µl (standard 110 µl)

\* Parameter/feature not available in the US

## Analyzers and Upgrade kits

Description	Catalogue No	SAP Cat. No
Abacus 5 with sample tube cap piercing	A5-I	10021849
Abacus 5 with Autosampler module	A5AS-I	10022017
Abacus 5 with Small Sample Volume module	A5SSM-I	10022045
Small Sample Volume module - Upgrade kit (for units pre 5/13)	A5SSM-Kit	10030744
Small Sample Volume module - Upgrade kit (for units post 4/13)	A5SSM01-Kit	10033068
Autosampler module - Upgrade kit	AS5-I	10022494

## Reagents for Abacus 5

SAP Cat. No	Cat. No.	Product name	Pack size
10023088	D1512	Diatro•Dil-5P	20 l
10023190	D3015HK	Diatro•Lyse-5P with Hardware Key	5 l
10023204	D3021	Diatro•Diff-5P	1 l
10023301	D8011	Diatro•Hypoclean CC	100 ml

diatron●●

We are a member of the STRATEC Group | [www.diatron.com](http://www.diatron.com) | [sales@diatron.com](mailto:sales@diatron.com)

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

Diatron MI Zrt makes best efforts to provide accurate information and specifications herein, whereby it may be possible for omissions or errors to have occurred. Diatron MI Zrt shall have no liability for the accuracy and completeness of the information and cannot be held liable for any representations or warranties, expressed or implied, and any third party claims or losses of any damages. Diatron MI Zrt reserves the right to make any changes to the information, including specifications, without notice. The applications and products herein may not be available in all markets. ©2019, Diatron MI Zrt, Hungary, all rights reserved.

Version Nr.A5190528V9

