

## Features :

Simultaneous 33 parameter measurement  
 Micro sampling capability  
 Status indicator  
 Walk away autoloader  
 Homogeneous built-in tube mixing  
 STAT/tube by tube sample analysis  
 DynaHelix Flow technology  
 DynaScatter Laser technology  
 Smart ColoRac Match  
 Integrated validation station with touch screen  
 Reagent and controls barcode management  
 Color 10.4-inch LCD touch screen  
 3 different dilution measurements  
 Automatic self-check, priming and nozzle cleaning  
 Complete QC programs : L & J / Westgard Multi rule /  
 $\bar{X}$ B( $\bar{X}$ Batch) management  
 Access restriction with password  
 Connection capability : RS232 / USB (Handy barcode, printer) /  
 Handy barcode reader / Printer / LAN / HL7

## Physical Specifications :

**Dimensions and Weight :**  
 Dimensions : 675 W × 589 D × 576 H mm  
 Weight : approx. 66 kg  
**Power Requirements :**  
 • Line voltage : AC 100 to 240 V ±10% AC, 50/60 Hz  
 • Power input : max 330 VA  
**Sound Pressure Level :** < 85dB  
**Parameters :**  
 WBC, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD,  
 PLT, PCT, MPV, PDW, P-LCR, NE, NE%, LY, LY%, MO, MO%, EO,  
 EO%, BA, BA%, P-LCC\*, Mentzer Index\*, RDWI\*, IG%\*, IG#\*,  
 Band%\*, Band#\*, Seg%\*, Seg#\*  
 (\* RUO parameters (Research Use Only)  
**Throughput :**  
 • Auto and manual measurement up to 90 samples/hour  
**Patient memory capacity :** 10,000 patient with graphs  
**Sample Volume :** • CBC : 25  $\mu$ L  
 • CBC+DIFF : 40  $\mu$ L  
 • Pre-dilution mode : 20  $\mu$ L  
**Barcode Format :**  
 Acceptable formats with or without check digits :  
 Industrial 2 of 5, ITF, JAN/EAN/UPC, NW-7, CODE 39,  
 CODE 93, CODE 128

## Methods and Technologies :

- WBC, RBC, PLT : Electrical resistance (DynaHelix Flow technology)
- HGB : Colorimetric method (surfactant method)
- HCT : Calculated from RBC histogram
- WBC differentiation : Light scatter by laser (DynaScatter Laser technology)
- MCV, MCH, MCHC : Calculated from RBC, HGB and HCT
- PCT : Calculated from PLT histogram
- MPV : Calculated from PLT and PCT
- RDW-CV, RDW-SD : Calculated from RBC histogram
- PDW and P-LCR : Calculated from PLT histogram
- WBC population : Calculated from scattergram

## Linearity and Reproducibility :

**Precision (Reproducibility)**  
 WBC : 2.0% or less (WBC :  $4.00 \times 10^3/\mu$ L or more)  
 RBC : 1.5% or less (RBC :  $4.00 \times 10^6/\mu$ L or more)  
 HGB : 1.5% or less  
 HCT : 1.5% or less  
 MCV : 1.0% or less  
 PLT : 4.0% or less (PLT :  $100 \times 10^3/\mu$ L or more)  
 NE% : 5.0% or less (NE% : 30.0% or more AND WBC :  $4.00 \times 10^3/\mu$ L or more)  
 LY% : 5.0% or less (LY% : 15.0% or more AND WBC :  $4.00 \times 10^3/\mu$ L or more)  
 MO% : 12.0% or less (MO% : 5.0% or more AND WBC :  $4.00 \times 10^3/\mu$ L or more)  
 EO% : 20.0% or less OR within  $\pm 1.0$  EO% (WBC :  $4.00 \times 10^3/\mu$ L or more)  
 BA% : 30.0% or less OR within  $\pm 1.0$  BA% (WBC :  $4.00 \times 10^3/\mu$ L or more)  
 NE : 8.0% or less (NE :  $1.20 \times 10^3/\mu$ L or more)  
 LY : 8.0% or less (LY :  $0.60 \times 10^3/\mu$ L or more)  
 MO : 20.0% or less (MO :  $0.20 \times 10^3/\mu$ L or more)  
 EO : 25.0% or less OR within  $\pm 0.10 \times 10^3/\mu$ L (WBC :  $4.00 \times 10^3/\mu$ L or more)  
 BA : 30.0% or less OR within  $\pm 0.10 \times 10^3/\mu$ L (WBC :  $4.00 \times 10^3/\mu$ L or more)  
 (Specifications above applies to normal mode)

### Linearity

- WBC : within  $\pm 3.0\%$  OR  $\pm 0.3 \times 10^3/\mu$ L (WBC : 0.20 to  $99.9 \times 10^3/\mu$ L)
  - RBC : within  $\pm 3.0\%$  OR  $\pm 0.08 \times 10^6/\mu$ L (RBC : 0.02 to  $8.00 \times 10^6/\mu$ L)
  - HGB : within  $\pm 1.5\%$  OR  $\pm 0.2$  g/dL (HGB : 0.10 to 25.0 g/dL)
  - HCT : within  $\pm 3.0\%$  OR  $\pm 1.0\%$  (HCT : 20.0 to 60.0%)
  - PLT : within  $\pm 10.0\%$  OR  $\pm 20 \times 10^3/\mu$ L (PLT : 10 to  $1490 \times 10^3/\mu$ L)
- (Specifications above applies to normal mode)

## Safety Standards Certification :

- IEC 60825-1 : 2014
- IEC 61010-1 : 2001
- IEC 61010-2-101 : 2002
- IEC 61326-2-6 : 2005
- EN 55011 : 2002 Group 1 Class B
- EN 60825-1 : 2014
- EN 61010-2-101 : 2002
- EN 61326-2-6 : 2006

## EMC Standards :

- IEC 61326-2-6 : 2005
- EN 55011 : 2002 Group 1 Class B
- EN 61326-2-6 : 2006

## Environmental Conditions :

- Operating temperature : 15 to 30°C (59 to 86°F)
- Operating humidity : 30 to 85%
- Operating atmospheric pressure : 700 to 1060 hPa

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