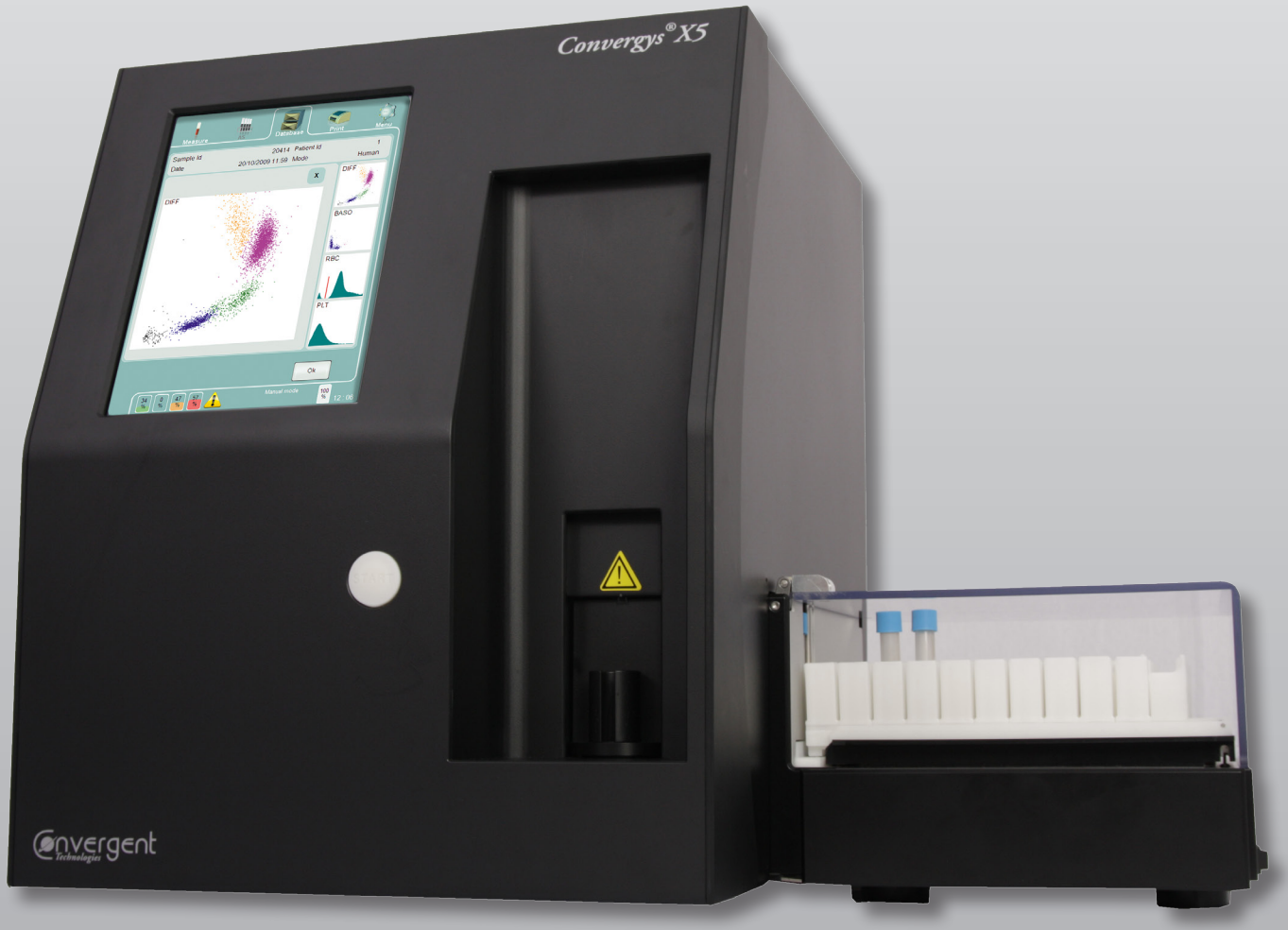
Convergys® X5

5-part WBC differential Hematology Analyzer



- 26 parameter 5-part WBC differential
- Laserlight scattering technology
- 110 µl sample volume of whole blood
- 25 µl optional small sample module (SSM) for pediatric use
- 60 tests per hour throughput
- Optional Autosampler with capacity for 100 samples
- Strict lysing process for best quality WBC differentiation
- Integrated clog prevention system
- 800x600 dots color graphic touch LCD
- Easy-to-use menu, based on Windows 8.1
- Large data storage for 100,000 records

Convergent Technologies

Convergys® X5 is one of the high-end models of Convergent Technologies hematology analyzers range. The *Convergys® X5* offers an optimal solution for hospitals, clinics and practices, which require a high throughput 26 parameter analyzer with *laser based optical measuring technology* for precise and accurate 5-part differential results for human samples. Our hematology analyzers bring the convenience and accuracy of the reference laboratory right into your practice, offering maximum value at low running costs.

With the addition of the optional **Small Sample Module (SSM*)** to the Convergys® X5, it is now possible to test samples having only a small blood volume in pediatric and neo-natal applications.

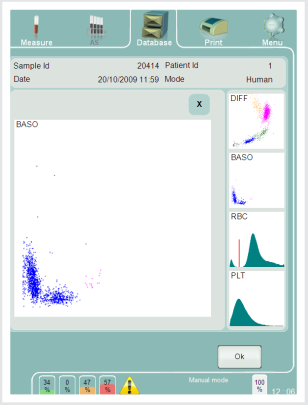
***SSM** is validated for use with 3 tube types - BD Vacutainer, Sarstedt Monovette and BD MAP to provide precise results on diluted samples. For use in open vial emergency mode only.

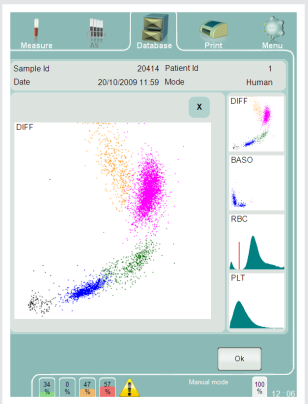
Convergys® X5

26 parameter 5-part WBC differential

High performance

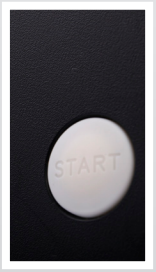
- Complete 26-parameter CBC profile including the optical determination of the 5-part WBC differential count
- Autosampler with integrated bar code reader and mixer available
- Diagnostic flagging system
- Color touch-screen to monitor the results with large histograms and scattergrams
- Sophisticated operating menu: The instrument features an easy-to-use, logically constructed multilingual operating menu. It provides unlimited QC levels, L-J graphs and self-diagnostic functions to let you monitor reliability and accuracy
- The optical *laser diode* measurement technology ensures a longer lifetime and precise results with the special, high-tech flow cuvette
- *Convergys® X5* ensures the data transfer with USB or RS-232 port to ensure the link to your established LIMS (Laboratory Integrated Management System) for further processing of the measured data

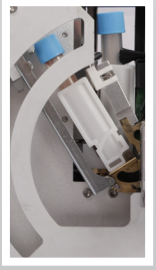




Specifications of Convergys® X5

Measured Parameters:	CBC + 5-part WBC differential mode, 26 parameters: WBC, LYM, MON, NEU, BAS, EOS, LYM%, MON%, NEU%, BAS%, EOS%, RBC, HGB, HCT, MCV, MCH, MCHC, RDWcv, RDWsd, PLT, P-LCC, P-LCR, PCT, MPV, PDWcv, PDWsd
Measuring Principles:	Volumetric Impedance Method for WBC, RBC and PLT, Spectrophotometry for HGB, Laser Light Scattering and Diffraction Technology for 5-part WBC Differential
Throughput:	60 tests per hour
Reagent System:	Isotonic Diluent, Hemolysing Agent (WBC, HGB), Hemolysing Agent (WBC, HGB, LYM, MON, NEU, EOS, BAS), Hypocleaner
Sampling Method:	Open and closed tube system with automatic sample rotor, ceramic shear valve with 3 separated primary loops
Sample Volume:	110 µl of whole blood or 25 µl with small sample volume module (SSM) option
Sample Types:	Human (general), Male, Female, Baby, Toddler and Child (built-in reference ranges)
Tube Identification:	Through on-screen or external keyboard (enter ID), Through barcode labels (manual barcode scanner and/or barcode scanner in Autosampler)
Dilution Ratios:	WBC/BAS 1: 170, RBC/PLT 1: 21250, 4 DIFF 1: 50
Chambers:	3 chambers for diluting whole blood and counting; 1:MIX, 1:RBC, 1:WBC+HGB
Aperture Diameter:	70 µm (RBC/PLT), 80 µm (WBC)
HGB Measurement:	Integrated in WBC chamber Light source: green LED with 568 nm wavelength Detector: light to frequency converter
Temperature Control Unit:	Transistors and semiconductors are used to maintain the Temperature Control Unit (TCU) temperature at 29°C for best quality WBC differentiation and maintain the size of WBC cells.
Optical Measurement:	Optical measuring head with closed protective housing Light source: semiconductor laser diode with 650 nm wavelength and 7mW (Class IIIB) Sample path: quartz flow cell with hydro-dynamic focusing Detector: fiber-optic coupled PIN Si photodiodes with internal safety interlock
Auto-Alignment System:	Horizontal calibration of laser beam position Fine calibration with calibration material (polystyrene micro-particle or polystyrene microsphere, 5 µm)
Clog Prevention:	High-voltage pulse on aperture in each analysis cycle; chemical cleaning; High-pressure back flush of aperture with cleaner reagent
Cleaning Procedure:	High-voltage burst of the aperture, high-pressure back flush, chemical cleaning of the aperture with cleaner reagent
Quality Control:	Unlimited QC levels, QC parameters include: mean, ± range, SD and CV for all measured and calculated parameters, Levey-Jennings charts, separate QC database
Calibration:	3 or 7 measurement SW supported automatic mode and manual (factors) calibration
Flagging:	Warning flags, pathological (diagnostic) flags, lab limits (normal ranges), reagents alert (internal buffers for reagents), instrument alerts
User Interface:	800 x 600 dots, color graphic touch LCD, portrait layout, easy-to-use menu driven user interface, based on Windows 8.1 OS
Multi-user Feature (advanced):	Multi-user operation with selective privilege levels, user identification with ID and password
Languages Available:	English menu with support for Croatian, German, Greek, Hungarian, Italian, Polish, Russian, Spanish and Turkish
Host Computer Interface:	USB ports, ethernet port and RS-232 serial link
Data Back-up Method:	USB mass storage device; external lab management system
Software Upgrade method:	USB port, using USB mass storage device
Data Storage Capacity:	100,000 records including flagging, QC, 4-Diff and BAS-scattergrams, RBC and PLT histograms
Data Processing:	Intel Atom 1.6 GHz Processor
Operating System:	Windows 8.1 embedded
Printer Interface:	Via USB port to any Windows 8.1 compatible printer
Display:	800 x 600 dots, color graphic touch LCD, portrait layout
External Keyboard and Mouse:	Via PS/2 or USB port
Barcode Reader:	Optional manual barcode scanner via USB, built-in barcode scanner in optional Autosampler
Peripheral Ports:	USB 2.0 (4pc.), Ethernet, PS/2
Power Requirements:	100-127 or 200-240 VAC, 47-63Hz
Operating Conditions:	15° to 30°C, 59-86°F (Optimal temperature is 25°C, 77°F), 10%~ 80% RH
Dimensions & Weight:	(W x D x H) 410x 493 x 520 mm, 36 kg

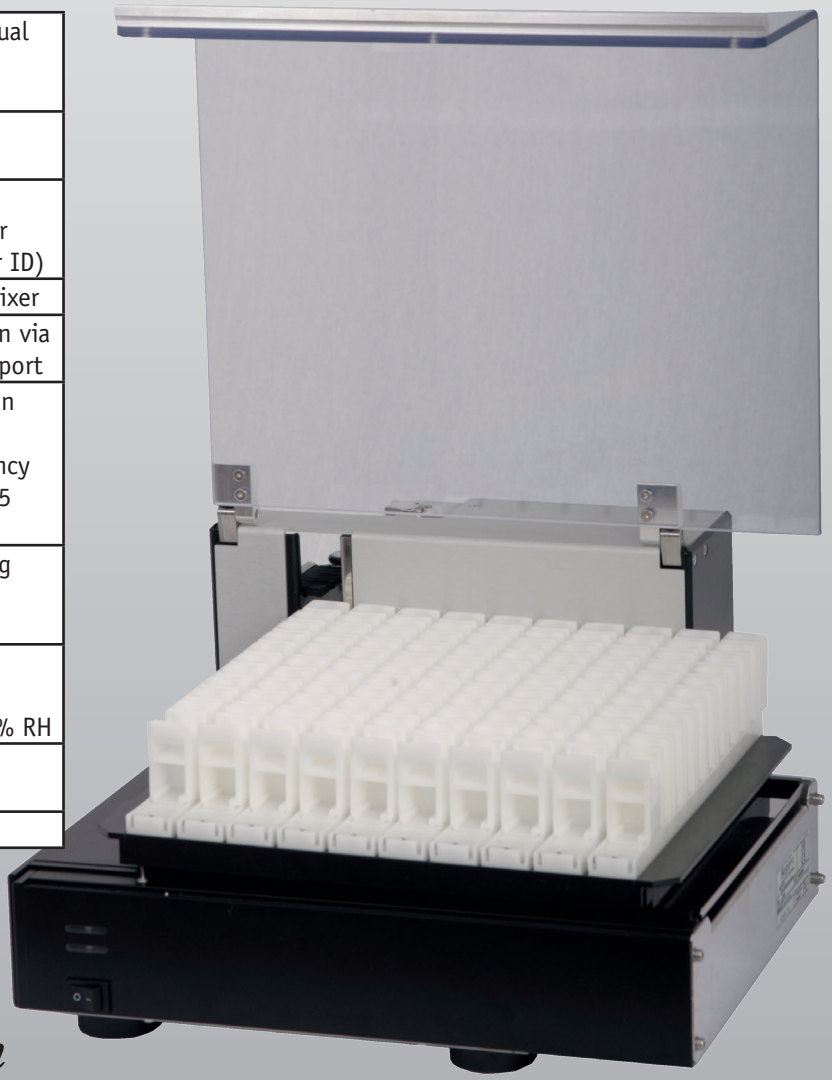




Optional Autosampler for Convergys® X5 with integrated Barcode scanner and Mixer

Specifications

Sample Capacity:	100 samples (10 individual racks for 10 x 10 sample tubes)
Autosampler Throughput:	60 tests / hour
Tube Identification:	Via integrated barcode scanner, via on-screen or external keyboard (enter ID)
Sample Preparation:	Via integrated sample mixer
Connection:	Plug and play connection via electronical connection port
Emergency Sample:	Emergency break function allowing the manual measurement of emergency samples via Convergys X5 sample rotor
Programming and Sampling:	Easy-to-use programming and sampling menu via Convergys X5 interface
Operating Conditions:	15°-30° C, 59-86° F (Optimal temperature is 25 °C, 77 °F), 10%~ 80% RH
Dimensions Analyzer with Autosampler:	(W x D x H) 671x 493 x 520 mm
Net Weight:	ca. 11 kg



Ordering Information

REF	Article Name	Description
1100-1700	*Convergys® X5* Main Unit	Fully automatic 5-part WBC differential Hematology Analyzer
1100-1710	*Convergys® X5* Autosampler	Autosampler for Convergys® X5 Hematology Analyzer
1100-1601	*Convergys®* Dil Diff (20L)	Isotonic diluent
1100-1702	*Convergys®* Lyse-5P (5L)	Hemolysing agent (WBC, HGB)
1100-1703	*Convergys®* Diff-5P (1L)	Hemolysing agent (WBC, HGB, LYM, MON, NEU, EOS, BAS)
1100-1704	*Convergys®* Hypoclean CC (100ml)	Hypochloride cleaner
1100-1720	*Convergys®* check 5P Low (3 ml)	Blood control material, low level
1100-1721	*Convergys®* check 5P Normal (3 ml)	Blood control material, normal level
1100-1722	*Convergys®* check 5P High (3 ml)	Blood control material, high level

Convergent Technologies reserves the right to change any of the specifications without prior notice.
Usage of original Convergent Technologies reagents is MANDATORY.
Full specifications are available on request.

CT_X5_VER004

Convergent Technologies

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