sysmex

PRODUCT FACT SHEET

SYSMEX XN-450

Brand	: Sysmex
Model / Type	: XN-450
Manufacturer	: Sysmex Corporation Japan

Summary

The XN-450 is a fully automated haematology analyser with one position automatic loader (closed-tube), member of the XN-L Series and part of the XN family. Encompassing Sysmex Silent Design®, high levels of performance and operability and proven Sysmex technology, the XN-450 provides full flexibility of profiles in haematology testing.

Productivity Values

L-WBC	Reliable analysis and accurate WBC counts including differentials for leucocytopenic samples in L-WBC measurement mode.
Speed-up	Decreased TAT by using the Speed-up application due to increased throughput from 60 to 70 samples/hour.

Standard Clinical Values

added value XN-DIFF	Standard routine testing supports the assessment of infection and provides guidance to aid in the diagnosis and therapy monitoring of infections by reliably counting immature granulocytes (IG).

Optional Clinical Values

added-value RET / added-value IPF	With the optional RET application, reliable diagnosis of anaemic patients, based on the complete picture of erythropoiesis by qualitative and quantitative information becomes standard. Early prognosis for therapy monitoring can be realised by advanced clinical parameters and their combinations (e.g. RET-He, IRF, IPF). In addition, the RET application provides improved PLT count reliability due to an automated switching algorithm in the case of interferences such as RBC fragments, microcytic RBC or giant PLT etc.*

	The optional Body Fluid (BF) application enables results with high precision in clinically relevant concentration ranges, providing the white blood cell count (WBC-BF) plus their differentiation into polymorphonuclear (PMN) and mononuclear cells (MN) in body fluid samples.**

Product Components

Item Code	Product Name	Quantity	Packaging
Main Component			
BM392756	Hematology Analyzer XN-450	1	Box
AL951256	XN-350/450 Supply Parts	1	Box
License and Software			
ZPS01228	RET license for XN-350/450/550	1	Unit
ZPS01229	IPF license for XN-350/450/550*	1	Unit
ZPS01230	BF license for XN-350/450/550**	1	Unit
ZPS01231	L-WBC license for XN-350/450/550***	1	Unit
ZPS01232	Speedup license for XN-350/450/550	1	Unit
AX305075	Security Master (3) Complete	1	Unit
Accessories			
AK369883	Intake Tube Assy No. 12	1	Box
CV022305	Spacer No. 813 (Optional)	1	Box
CT130820	Intake Tube Assy No. 59 (Optional)	1	Box

Product Specifications

Features	Description
Principle Technologies	**Fluorescent Flow Cytometry method:** *WBC, DIFF RET, IPF*, 2-part differential for body fluid analysis*** **Hydrodynamic focusing DC detection method:** *PLT-I (Impedance), RBC, HCT* **Cyanide-free SLS-haemoglobin method:** *HGB*
Standard Parameter	**28 Parameters** *Whole blood / Pre-dilution mode: WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, RDW-SD, RDW-CV, PDW, MPV, P-LCR, PCT, NEUT#, LYMPH#, MONO#, EO#, BASO#, NEUT%, LYMPH%, MONO%, EO%, BASO%, IG#, IG%, MicroR, MacroR*

Optional Parameter	**12 RET Parameters** *RET#, RET%, IRF, LFR, MFR, HFR, RET-He, PLT-O, RBC-He, Delta-He, HYPO-He, HYPER-He* **2 IPF Parameters*** *IPF#, IPF* **7 Body Fluid Parameters**** *WBC-BF, RBC-BF, MN#, PMN#, MN%, PMN%, TC-BF#*
Display Screen	**Fully integrated IPU (information-processing unit), including an LCD color touchscreen (10.4 inch)**
Reagent, Control and Calibrator	**Reagent :** *CBC + DIFF : Cellpack DCL, Sulfolyser, Lysercell WDF, Fluorocell WDF* *RET / IPF*: Cellpack DFL, Fluorocell RET* **Control :** *XN-L Check (L1, L2, L3) or XN-Check (L1, L2, L3)***** *XN-Check BF (L1, L2)*** **Calibrator :** *XN Cal*
Throughput (Analysis time)	**CBC / CBC + DIFF :** *up to 70 samples / hour (approx. 51.4 seconds / sample)* **CBC + DIFF + RET :** *up to 35 samples / hour (approx. 102.9 seconds / sample)* **Body Fluid :** *up to 30 samples / hour (approx. 120 seconds / sample)***
Start-up	**At least 1 minute** *(from logon to be ready, depending on the instrument's condition from the previous logout)*
Result Display	**Histogram :** *RBC, PLT ;* **Scattergram :** *WDF, RET, PLT-O, Body Fluid*
Sample Aspiration Volume	**Whole Blood / Low WBC Mode*** :** *25 µL* **Pre-dilution / Capillary Mode :** *70 µL* **Body Fluid WBC Mode :** *70 µL***
Data Storage	**Results:** *100,000 samples* **Specimen information:** *10,000 records* **QC files:** *99 files / analyser* **QC plots :** *300 plots / file* **Reagent replacement history:** *5,000 records* **Maintenance history:** *5,000 records*
Sample Aspiration type	**Closed analysis type** *A single sample is placed and automatically analysed*

Dimension and Weight	Width: *450 mm*
	Depth: *460 mm*
	Height: *440 mm*
	Approx. *35 kg*

Note:

* Optional, applicable if IPF license is activated

** Optional, applicable if BF license is activated

*** Optional, applicable if L-WBC license is activated

**** The number of QC control levels used depends on the laboratory's requirements; according to guidelines, a minimum of two levels is recommended.