

Product Fact Sheet

XN-450



Product name

XN-450

Manufacturer information

Sysmex Corporation
www.sysmex-europe.com

Summary

The XN-450 is a 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.

Optional Productivity values

- Reliable analysis and accurate WBC counts including differentials for leucocytopenic samples in L-WBC measurement mode.



- Decreased TAT by using the Speed-up application due to increased throughput from 60 to 70 samples/hour .



Standard Clinical values

- Standard routine testing supports the detection of infections and provides guidance for diagnosis and therapy monitoring of infections by reliably counting immature granulocytes (IG).



Optional Clinical values

- Using the optional RET application, reliable diagnosis of anaemic patients, based on the complete picture of the 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-H_e, IRF).

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.



- Using the optional BF application, availability of results with high precision in clinically relevant concentration ranges and support in detection of inflammatory processes (e.g. by WBC-BF count completed by PMN, MN) by using the optional BF mode becomes standard.



Main Components

BOM No.	Item	Description	Qty
SE000621	XN-450	XN-450 main unit including items listed in the table below	1

The following items are included in the BOM:

Article No.	Item	Description	Qty
BM392756	XN-450	XN-450 main unit (excl. supply parts)	1
38000340	Handheld BR Gryphon	Handheld barcode reader (excl. cable for connection to instrument)	1

38000313	CAB-426 CABLE XN/XT/XS/UF- 1000I	Cable for connection of handheld barcode reader to instrument	1
CE537607	XN-350/450 SUPPLY PARTS (EU)	Supply parts (for detailed content see IFU)	1
ZE000539	Perixx Keyboard PERIBOARD- 505H PLUS [US]	Additional keyboard for service (international keyboard)	1
ZE000544	XN-L INSTALLATION KIT	Installation kit (incl. ZE000537 XN-L EMBEDDED SOFTWARE-IPU MEDIKIT, ZE000538 XN-L Labelling KIT)	1

38000305	Gryphon Desk- /Wall Holder	Wall holder for handheld barcode reader 38000340	1
AK369883	Intake Tube ASSY NO. 12	For connecting 20L CELLPACK DCL (politainer)	1
ZE000550	Spout Kit FOR 5L POLITAINER	For connecting 5L Sulfolyser (politainer) and 5 L Lysercell WDF (politainer)	1
CM915147	Intake Tube ASSY NO. 70	For connecting 4L Lysercell WDF (paper pack) and 1.5L CELLPACK DFL (paper pack)	1

Optional Components

Article no.	Item	Description	Qty
ZE000540	XN-L BF licence	XN-L licence for the BF mode	1
ZE000541	XN-L RET licence	XN-L licence for the RET channel	1
ZE000542	XN-L L-WBC licence	XN-L licence for the low WBC mode	1
ZE000543	XN-L Speed-up licence	XN-L licence for higher throughput	1
01330061	PU-17 COMPLETE 200V(white)	Additional pneumatic unit for use at high altitude	1
ZE000321	<i>Extended</i> IPU Media kit	SW to interlink all Sysmex workplaces to improve sample and data workflow	1
VS933AV	<i>Extended</i> IPU server hardware Standard	Computer hardware for the <i>Extended</i> IPU server	1
XL510AV	<i>Extended</i> IPU client hardware	Computer hardware for an <i>Extended</i> IPU client	1
XN375ATAB B	<i>Extended</i> IPU TFT monitor	TFT monitor for <i>Extended</i> IPU server and client hardware	1
SE000893	<i>Ext.</i> IPU SQLSV 2012 STD RT 1 LIC 5 CAL	SQL Server Licence for <i>Extended</i> IPU; CAL licence package including licences for 5 CALs	1
ZE000902	Handheld BR GRYPHON Cordless complete	Handheld cordless barcode reader as alternative for 38000340	1

Reagents

Article no.	Item	Qty
CU228496	CELLPACK DCL	10L
05433514	SULFOLYSER	1 x 500mL
90411317	SULFOLYSER	3 x 500mL
BG689680	LYSERCELL WDF	1 x 2L
AA325279	FLUOROCELL WDF	2 x 2mL
83401621	CELLCLEAN	1 x 50mL
CF579595	CELLCLEAN AUTO	20 x 4mL
AR829995	CELLPACK DFL	1 x 1L
CU920210	FLUOROCELL RET	2 x 12mL

Quality control and calibration

Article no.	Item	Qty
213484	XN Check L1	8 x 3mL
213485	XN Check L2	8 x 3mL
213486	XN Check L3	8 x 3mL
213510	XN Check BF	2 levels 3 x 3mL
213523	XN CAL	3 x 3mL
	USB STICK	1
ZE000528	XN Check/XN Check BF	
ZE000548	USB STICK XN CAL	1

Specifications

Feature	Description
Standard parameters	26 Standard diagnostic parameters

(whole blood)	<p>CBC WBC, RBC, HGB, HCT, MCHC, MCH, MCV, PLT, RDW-SD, RDW-CV, MPV, PDW, P-LCR, PCT</p> <p>XN-DIFF NEUT%, MONO%, EO%, BASO%, LYMPH%, IG%, NEUT#, MONO#, EO#, BASO#, LYMPH#, IG#</p>
Optional parameters (whole blood)	<p>RET RET%, RET#, IRF, LFR, MFR, HFR, PLT-O, RET-H_e</p> <p>XN-BF WBC-BF, RBC-BF, PMN%, PMN#, MN%, MN#, TNC</p>
Research parameters (whole blood)	<p>CBC Micro RBC, Macro RBC</p> <p>XN-DIFF TNC, TNC-C, TNC-D, WBC-C, WBC-D, NE-SSC, NE-SFL, NE-FSC, NRBC #, NRCB %, HFLC#, HFLC%</p> <p>RET Hypo-H_e, Hyper-H_e, FRC#, FRC%, RPI, Delta-H_e, RBC-H_e, RBC-O, HGB-O, MCHC-O, Delta-HGB</p> <p>XN-BF HF-BF#, HF-BF%, NE-BF#, NE-BF%, LY-BF#, LY-BF%, MO-BF#, MO-BF%, EO-BF#, EO-BF%, RBC-BF-2</p>
Technologies	<ul style="list-style-type: none"> Fluorescence flow cytometry Hydrodynamic focused impedance measurement SLS Haemoglobin method
Throughput	<p>CBC Up to 60 (70^{*1}) samples/hour</p> <p>CBC+DIFF Up to 60 (70^{*1}) samples/hour</p> <p>CBC+RET Up to 35 samples/hour</p> <p>CBC+DIFF+RET Up to 35 samples/hour</p> <p>Body Fluid (BF) analysis Up to 40 samples/hour (BF mode only)</p> <p>¹ – With optional Speed-up Licence</p>
Aspiration volume	
Manual mode	25µL
Sampler mode	25µL
Low WBC mode	25µL
Pre-dilution mode	70µL
Body fluid mode	70µL

Data storage	
Samples (incl. graphics)	100,000 (including histograms and scattergrams)
Patient information	10,000
Wards registered	200 wards
Doctors names registered	200 names
Calibration log	20 records
Quality control files	99 files (300 plots per file)
Analysis registration function	2,000 records
Reagent replacement history	5,000 records
Maintenance history	5,000 records
QC functions	
Xbar and or L-J	300 plots x 96 files (L-J control)
XbarM	300 plots x 3 files (XbarM control)
Weight	
Main unit	Approx. 35kg
Dimensions	Approx. 450 (W) x Approx. 460 (D) x Approx. 440 (H) mm
Interface	RS-232C, 2x Ethernet (RJ45), 4x USB
Operating system	Embedded Microsoft [®] Windows 7 with McAfee Security
Operative temperature	15 to 35 °C
Operative humidity	30 to 85 %
Noise level	60dB or less
Power requirement	
Main unit	AC 100 to 240V (50/60 Hz)
Power consumption	
Main unit	235 VA

Reference: XN-L BO, GI & TS IFU 1412