XN-Series Automated Haematology Analysers

XN-1000 / 2000

Shaping Haematology

www.sysmex-ap.com
XN-Standalone Series

There are 2 standalone XN configurations:
- XN-1000 (1 analyser)
- XN-2000 (2 analysers)

Within its small footprint, the standalone series delivers vast operational capabilities and clinical flexibility. These capabilities can be optimised for laboratories with lower daily workloads and wide clinical needs.

First step into full automation

XN-1000
- Hourly throughput of up to 100 samples
- Onboard decision rules with user-defined rerun/reflex capabilities
- Customisable clinical applications to cater to variable clinical needs

Workload optimisation

XN-2000
- Hourly capacity of up to 200 samples per hour
- Unique co-primary solution
- Automatic workload balancing between the 2 analysers
- Reagent sharing option is available
Core Technology of XN-Series

The XN series utilise the laser flow cytometry for counting of blood cells. Depending on the cellular characteristics of the cells, different intensities of the signals are collected, and scattergrams of respective measuring channels are populated. These scattergrams are used for the classification of the cells as well as flagging of the abnormal population.

Advanced Parameters On XN-Series Provides Superior Diagnostic Values

Standard applications

- WNR
- WDF
- WPC*

The following advanced parameters are available as a standard:
- Corrected WBC with direct measurements of NRBCs for every CBC analysis
- 6 part differential, including immature granulocytes
- Highly specific flagging of WBC abnormal population in WPC channel, available only in XN-20 (Human progenitor cell, HPC enumeration is available on XN-20 with additional software activation)

*WPC channel is available on XN-20 only
Added value:

**Indices of thrombopoiesis (IPF):**
- IPF (Immature platelet fraction) aids in differential diagnosis of thrombocytopenic disorders and is an early predictor of platelet recovery.
- Fluorescent platelet (PLT-F) count that shows excellent correlation with CD61/41 alongside with thrombopoietic marker, immature platelet fraction (IPF).

**Added value:**

- High comparability between Human Progenitor Cells (HPC) measurement and CD34 analysis supports rapid analysis in determination of optimal PB stem cell collection.

**Indices of erythropoiesis (RET, Ret-He, IRF):**
- Ret-He (reticulocytes hemoglobin) and IRF (immature reticulocytes fraction) aids in monitoring of RBC production.
- Ret-He (reticulocytes hemoglobin) aids in differentiation between functional and classical iron deficiency and monitoring of EPO and/or IV iron therapy.

**Added value:**

- Fully-automated body fluid analysis in BF mode:
  - 2-part differential body fluid analysis includes MN (mononuclear) and PMN (polymorphonuclear) cell population to aid in the distinction between viral and bacterial infection.
  - No additional reagents required.
  - No special sample preparation required.

**Body Fluid Scattergram**

**HPC Scattergram**

**PLT-F Scattergram**

**RET Scattergram**
The Needs Of Tomorrow’s Laboratory

XN-Series partners your laboratory through the future. Clinical applications can be added to existing standalone configurations when the clinical needs evolve. On top of this, XN-1000 can also be upgraded to a XN-2000 when the workload of the laboratory increases. A common software throughout the XN-Series also minimises the need for re-training. XN-Series truly caters for today’s and future needs of the laboratory.

XN-Series, the automated haematology solutions for your laboratories.

## Specifications

### Principles & Technologies

**Fluorescent Flow Cytometry**
- WBC, Differential, NRBC, RET, IRF, PLT-F, IFP, HPC²,
- 2 part differential for body fluid analysis

**Hydrodynamic Focusing (DC Detection)**
- PLT-I (Impedance), RBC, HCT

**Cyanide-free SLS Method**
- Haemoglobin

### 30 Standard Parameters

- WBC, NRBC#, NRBC%, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-SD, RDW-CV, MicroR¹, MacroR, PLT, PDW, MPV, PCT, P-LCR, NEUT#, NEUT%, LYMPH#, LYMPH%, MONO#, MONO%, EOSIN#, EOSIN%, BASO#, BASO%, IG#, IG%

### 16 Optional Parameters

- RET#, RET%, IRF, LRF, MFR, HFR, RET-He, RBC-He, Delta-He, HYPO-He, HYPER-He, PLT-O (Optical), PLT-F (Fluorescent), IPF#, IPF, HPC²

### Body Fluid Analysis

**Sample Type**
- CSF, CAPD, Synovial and Serous fluids

**7 Reportable Parameters**
- WBC-BF, MN#, MN%, PMN#, PMN%, TC-BF#, RBC-BF

### Throughput (Whole Blood)

- **XN-1000**
  - up to 100 samples/hour (max.)

- **XN-2000**
  - up to 200 samples/hour (max.)

### Sample Aspiration Volumes

- **Whole Blood**
  - 88µL

- **Pre-dilute Mode**
  - 20µL

- **Body Fluid Mode**
  - 88µL

- **HPC Mode**
  - 190µL

### Quality Control

- Tri-level QC material for all parameters
- Bi-level Body fluid QC materials

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**Note:**
1. MicroR, MacroR, RBC-He, Delta-He, HYPO-He, HYPER-He are reportable from software version 21.00 onwards.
2. HPC² is available only for XN-20.
References


