Automated Haematology Analyser

XN-L Series

Leading Haematology for Better Patient Care

www.sysmex-ap.com
Upgrade your 3PD to 6PD with Sysmex

Why 5PD?

- **3PD Analyser**
  - Neutrophils
  - Mixed
  - Lymphocytes

- **5PD Analyser**
  - Neutrophils
  - Eosinophils
  - Basophils
  - Monocytes
  - Lymphocytes

Five part differential analysers count monocytes, eosinophils, and basophils separately rather than as a mixed population in three part differential analysers. These individual WBC parameters reveal more valuable information to clinicians to support diagnostic and treatment decisions.

Why Sysmex 6PD?

- **3PD Analyser**
  - Lymphocytes
  - Monocytes
  - Basophils
  - Eosinophils
  - Neutrophils

- **Sysmex 6PD Analyser**

Examples of WBC Flags:
- WBC Abn Scattergram
- Neutropenia
- Neutrophilia
- Lymphopenia
- Lymphocytosis
- Monocytosis
- Eosinophilia
- Leukocytopenia
- Leukocytosis
- Blasts/Abn Lympho?
- Left Shift?
- Atypical Lympho?
- NRBC?

Benefits of Sysmex 6PD Analyser

1) **Assessment is not solely based on cell size**

Unlike three part differential and some five part differential analysers, fluorescent flow cytometry measures not only the cell size, but also the intracellular information and nucleic acid content. This produces a highly accurate differential count in EDTA blood samples even as the cell size changes during normal storage.

2) **Identification of immature cells**

Identification of immature cells is possible with the XN-L as immature cells have a higher nucleic acid content. This has made the generation of six part differential possible. The precision of an automated IG count increases laboratory efficiency by reducing manual counts.

3) **Superior flagging system for abnormal cells**

As compared to a flagging system based entirely on cell size on a three part differential analyser, the XN-L provides more detailed and specific flagging for abnormal cells.
Introducing XN-L Series

XN-L Series is the latest compact fully-automated 6-part differential haematology analyser from Sysmex. It is designed to meet today’s laboratory needs by providing enhanced clinical values that only high-end models were previously able to provide; delivering improved operational efficiency in the laboratories.

XN-L Series is available in four models with different aspiration modes.

- **XN-550**: Sampler that allows both open and closed tube analysis
- **XN-450**: Closed tube analysis
- **XN-330 / XN-350**: Open tube analysis
A completely new compact 6-part differential haematology analyser that caters for what matters most in your lab.

1 **Ease of use & peace of mind**

Multi-coloured touch screen display embedded with intuitive graphical user interface to support your routine tasks.

A reagent management system that calculates remaining tests and expiry dates to allow more efficient tracking of reagent usage.

2 **Space saving**

Compact design with an in-built IPU that fits easily to any laboratory bench or table with a smaller footprint.

Existing model XS-1000i

Approx. 200mm

3 **Flexibility**

Only **25µL** of aspiration volume

Requires only 25 µl of aspiration volume for whole blood mode and low WBC mode.

**Auto-diluent dispensing function**

Auto-diluent dispensing function is available for dilution of samples.
Improved workflow and TAT

Up to **70 samples/hour**
Better TAT with one of the highest throughput compact 6PD analysers in the market.

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Sampler available for a truly walk-away system**

- Left drawer
- Right drawer

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Integrated auto Repeat, Rerun and Reflex** of sample

- First / Initial analysis
- Error
- Results validation using onboard rules
- Repeat Analysis
- Rerun Analysis
- Analysis of additional parameters
- Reflex Analysis

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*Only available on XN-350 / XN-450 / XN-550
**Only available on XN-550
Core Technology of XN-L Series

XN-L Series utilises the same core technology as high-end haematology analysers - the proven and reliable laser flow cytometry - to count and analyse cells. After the cells are irradiated by the laser beam, the forward scattered light (FSC), side scattered light (SSC) and side fluorescent light (SFL) of the cells are analysed. The three signals are used to differentiate and count cells with the help of unique digital technology and algorithms.

Standard application

Added value:
- Immature granulocytes (IG) with every differential analysis aids in the early prediction of infection and inflammation.
- No additional reagents required.
**Optional applications**

**Added value:**

**Analysis of low WBC samples in L-WBC mode:**
- Samples with low white blood cell count can be measured accurately by counting twice as many cells; providing reliable results that aid in chemotherapy monitoring.

**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.

**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.

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*Only available on XN-350 / XN-450 / XN-550*
What’s more

Extended Connectivity

- XN-L supports extended connectivity to meet a laboratory’s various connectivity requirements.

![Extended Connectivity Image]

RS-232C port and LAN port for host computer connection

4 USB ports for handheld barcode reader, printer and USB device connections. (all USB devices are optional)

Standardisation across Sysmex platforms

- Compatibility with the XN-Series through common reagents, controls and technology allows for consistency across laboratory operations.

1 Common reagents and QC materials

Reagents and QC materials utilised with the XN-Series can be used on the XN-L Series.

2 Uniform user interface

The XN-L analysers use the same user interface as the XN-Series.

3 Identical core technology and clinical parameters

Enhanced clinical parameters makes the XN-L Series the perfect backup for 24/7 laboratories.
### Specifications

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<thead>
<tr>
<th>XN-330</th>
<th>XN-350</th>
<th>XN-450</th>
<th>XN-550</th>
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<tbody>
<tr>
<td><strong>Principles &amp; Technologies</strong></td>
<td><strong>Fluorescent Flow Cytometry method:</strong>&lt;br&gt;WBC, DIFF&lt;br&gt;RET, IPF, 2-part differential for body fluid analysis (except XN-330)&lt;br&gt;<strong>Hydrodynamic focusing DC detection method:</strong>&lt;br&gt;PLT-I (Impedance), RBC, HCT&lt;br&gt;<strong>Cyanide-free SLS-haemoglobin method:</strong>&lt;br&gt;HGB</td>
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<td><strong>Parameters</strong></td>
<td><strong>28 Parameters</strong>&lt;br&gt;Whole blood / Pre-dilution mode:&lt;br&gt;WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, RDW-SD, RDW-CV, PDW, MPV, P-LCR, PCT, NEUT#, LYMHP#, MONO#, EO#, BASO#, NEUT%, LYMHP%, MONO%, EO%, BASO%, IG#, IG%, MicroR, MacroR</td>
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<td><strong>Optional Parameters</strong>&lt;br&gt; (Except XN-330)&lt;br&gt;14 RET &amp; IPF Parameters&lt;br&gt;RET#, RET%, IRF, LFR, MFR, HFR, RET-He, PLT-O, IPF#, IPF, RBC-He, Delta-He, HYPO-He, HYPER-He</td>
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<td><strong>7 Body Fluids Parameters</strong>&lt;br&gt;Body Fluid mode&lt;br&gt;WBC-BF, RBC-BF, MN#, PMN#, MN%, PMN%, TC-BF#</td>
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<td><strong>Throughput</strong></td>
<td>CBC: up to 70 samples/hour&lt;br&gt;CBC + DIFF: up to 70 samples/hour&lt;br&gt;CBC + DIFF + RET: up to 35 samples/hour&lt;br&gt;Body fluid mode: up to 30 samples/hour</td>
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<td><strong>Sample Aspiration Volume</strong></td>
<td>Whole blood mode: 25 µl&lt;br&gt;Pre-dilution mode: 70 µl</td>
<td>Whole blood / Low WBC mode: 25 µl&lt;br&gt;Pre-dilution mode: 70 µl&lt;br&gt;Body fluid mode: 70 µl</td>
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<td><strong>Data Storage</strong></td>
<td>Results: 100,000 samples&lt;br&gt;Patient information: 10,000 records&lt;br&gt;QC files: 99 files / analyser&lt;br&gt;QC plots: 300 plots / file&lt;br&gt;Reagent replacement history: 5,000 records&lt;br&gt;Maintenance history: 5,000 records</td>
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<td><strong>Dimensions and Weight</strong></td>
<td>Width: 450 mm&lt;br&gt;Depth: 460 mm&lt;br&gt;Height: 510 mm&lt;br&gt;Approx. 35 kg</td>
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<td>Width: 450 mm&lt;br&gt;Depth: 460 mm&lt;br&gt;Height: 440 mm&lt;br&gt;Approx. 35 kg</td>
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References:


