Automated Hematology System

XN-9100

Reshaping scalable automation

www.sysmex.com/us
Optimize your laboratory

As analyzers become increasingly sophisticated, the laboratory’s contribution to the continuum of patient care is always evolving. Sysmex’s innovative and progressive diagnostic solutions set us apart from every other IVD company on the market. With thoughtful innovation, Sysmex has created state-of-the-art software and instrumentation that helps improve lab operations and promotes better healthcare and patient management practices.

Connect the pieces for a holistic technology solution

**ADVANCED TOOLS AND TECHNOLOGIES**
Productivity and efficiency enhancements that are supported by:
- Auto-validation
- Automatic workload balancing
- Rerun/reflex testing
- Reflexive slide preparation
- Work Area Manager (WAM) middleware for unparalleled workflow efficiency

**HARMONIZED SUPPORT**
- Workflow assessment and optimization
- Comprehensive continuing education
- \textit{Insight\textsuperscript{TM}} IQAP
- BeyondCare\textsuperscript{TM}

**NEXT GENERATION DIAGNOSTICS**
Advanced clinical parameters:
- Leukopoietic indicators—Immature granulocytes with every differential
- Erythropoietic indicators—Nucleated RBC with every CBC, reticulocyte hemoglobin (RET-H\textsubscript{e}) and immature reticulocyte fraction (IRF)
- Thrombopoietic indicators—Immature platelet fraction (IPF) and a fluorescent platelet count (PLT-F) designed for very low platelet counts

**PROCESS OPTIMIZATION**
- Remarkably smaller footprint to optimize increasingly precious laboratory space
BeyondCare

BeyondCare from Sysmex changes the definition of service for today’s advanced hematology laboratories. Missing a potential analyzer issue can compromise patient care, so BeyondCare is strategically focused on preventing problems before they ever occur. Sysmex’s innovative technology maximizes your system’s performance, bringing new levels of insight, efficiency and agility to your lab. This includes Comprehensive Continuing Education, Evidence-based Managed Calibration and Insight IQAP. Make sure to ask your Sysmex representative about these programs for your XN-Series Analyzer.
Full automation has changed forever

The XN-9100 is a scalable, modular automation system. It provides your choice of efficiencies to meet the needs of labs across any size, complexity and specialty. Decreased turnaround time and optimized labor utilization while maintaining high-quality patient results may be achieved through automatic workload balancing, hands-free rerun/reflex testing and fully automated reflexive slide preparation.

Your system is customized with various modules to include automated hematology analyzers, next-generation slidemaker/stainer, cell image analyzers, tube sorters and HbA1c analyzers, as well as Sysmex WAM™ middleware.

The XN-9100 is the perfect system to meet all of your needs in today’s challenging healthcare environment.

Whether you need a common configuration as shown below or you need a custom system with full Lavender Top Management™, Sysmex has the hematology system to meet your requirements.

*All dimensions noted above are approximate.
 Sysmex WAM middleware

Decision support software for the clinical laboratory provides scalable informatics and work area management for enhanced sample and data process management. It is a comprehensive hematology information management system featuring auto-validation, single interface to LIS, and a complex rules engine based on patient demographics, patient location, physician, patient identifiers, specimen age and extended delta-checking. It provides comprehensive management reports, and it can be used in multi-site, multi-LIS environments for paperless data process integration. It can also be part of our Lavender Top Management configurations.
Our specifications speak volumes...

XN-9100-401

Components:
- All XN-9100 components, including four XN-10 Analyzers
- One SP-50 Slidemaker/Stainer
- RU-20 Concentrated Reagent Delivery System

Throughput:
- Up to 400 CBCs / hour
- Up to 75 smears / hour

XN-9100-301

Components:
- All XN-9100 components, including three XN Analyzers
- One SP-50 Slidemaker/Stainer
- RU-20 Concentrated Reagent Delivery System

Throughput:
- Up to 300 CBCs / hour
- Up to 75 smears / hour

XN-9100-201

Components:
- All XN-9100 components, including two XN Analyzers
- One SP-50 Slidemaker/Stainer
- RU-20 Concentrated Reagent Delivery System

Throughput:
- Up to 200 CBCs / hour
- Up to 75 smears / hour

Standard components with every system
- Sample/rack management modules
- Any combination of XN-10 and XN-20 analyzer (cell counter) modules
- Body fluid mode
- PLT-F (fluorescent platelet) discrete testing channel
- Reticulocyte channel
- RU-20 Concentrated reagent delivery system
- Network printer
- Status alert lights

Optional components:
- SP-50 Slidemaker/Stainer
- DI-60 Cell image analyzer
- TS-10 Tube sorter
- Sysmex WAM middleware
- Turn unit
- Line is compatible with Bio-Rad Hemoglobin A1c analyzer
- Total lab automation (TLA) connectivity
Reportable parameters by channel

- WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT (PLT-I), NRBC%, NRBC#, RDW-SD, RDW-CV, MPV
- NEUT%, LYMPH%, MONO%, EO%, BASO%, IG%, NEUT#, LYMPH#, MONO#, EO#, BASO#, IG#
- Provides improved differentiation of blast cell and abnormal lymphocyte flagging; no reportable parameters. Available with XN-20 analyzers
- WBC-BF, RBC-BF, MN%, MN#, PMN%, PMN#, TC-BF# (Body Fluids, B License)
- PLT (PLT-F), IPF (Platelets, P License)
- RET%, RET#, IRF, RET-He (Reticulocytes, R License)

Throughput

- Up to 100 CBCs / hour / analyzer module

Sample transport workflow

- Standard: Right side load and unload
- Optional: Left side load and unload
  - Right side load and left side unload

Quality control

- XN CHECK™ and XN CHECK BF for simple QC, through the Sysmex Insight IQAP
- XN CHECK
  - One material for QC of all Whole Blood Parameters
  - Complete tri-level QC product for all CBC, Diff, PLT and Reticulocyte parameters
- XN CHECK BF
  - One material for QC of all Body Fluid parameters
  - Complete bi-level QC product for TNC, WBC, RBC, and reportable 2-part Diff parameters

IPU decision rules environment:

- Pre-loaded template within the XN-Series IPU (PC)
- Customer editable/adjustable
- Easily enabled/disabled

Streamlined reagent management

- Smaller, lighter reagent containers:
  - Color-coding from container to software reagent screen increases operator ease and convenience
  - Designed to fit perfectly within the XN-Series system wagons
- RFID (Radio Frequency ID) tags
- RU-20 Concentrated Reagent Delivery System*:
  - Dilutes concentrated diluent (CELLPACK™ DST) to create ready-to-use CELLPACK DCL.
  - Fewer reagent changes provide greater instrument availability and improved workflow.

Concentrated reagent/diluter (RU-20)

* Recommended minimum workload is 55 samples per day when using the 2x4L packaging, 200+ samples per day when using the 20L packaging.
A consultative approach to maximize efficiency and flexibility

Our Lab Solution Consultants provide a comprehensive analysis and recommendation to meet your labs’ current needs, and help you prepare for growth beyond today.

Analyzer Module
The XN-10 and XN-20 CBC modules are designed to provide accurate CBC results with comprehensive flagging and rerun/reflex rules for reliable whole blood screening. The XN-10 analyzer offers CBC, automated differential, fluorescent platelet, reticulocyte, and body fluid testing. The XN-20 analyzer offers an additional white cell precursor (WPC) channel that provides improved differential of abnormal WBC populations when indicated. The XN-9100 line can include any combination of XN-10 and XN-20 units. The XN-Series CBC analyzer modules and track components may be added to increase testing capacity (additional throughput of up to 100 CBCs / analyzer / hour).

Reagent Preparation
The RU-20 Concentrated Reagent Delivery System will reconstitute CELLPACk DST to produce the ideal diluent for your system. A single RU-20 will supply up to three XN units with prepared diluent.

Slidemaker/stainer
Slidemaker/stainer includes SP-50 and track components to provide additional, fully automated slidemaking/staining capacity.

Cell Image Analysis Module
The Cell Image Analysis Module option is designed to automate and standardize the smear review process. This module includes the cell imaging system, PC and Wagon that is ready to integrate with either a XN-9100 automation line or a slidemaker/stainer. The image analyzer can be interfaced directly to the laboratory information system (LIS) or to the Sysmex WAM.
**Tube Sorter**

The Tube Sorter option is designed for laboratories desiring a hands-free pre- and post-analytical Lavender Top Management™ (LTM) solution. It is ideal for labs with less than 950 lavender top tubes through system during multiple peak workload hours. The Sysmex Laboratory Solutions Consultant (LSC) provides recommendations for the best configurations and workflow. Sysmex WAM (work area management) software is also part of this solution, which drives integrated sample processing, routing and tracking (on and off the system).

**HbA1c Analyzer Module**

The HbA1c Analyzer option for Lavender Top Management (XN-9100 with the tube sorter and Sysmex WAM options) consists of a Bio-Rad VARIANT II TURBO™ Link instrument and automation track components. The required tube sorter and Sysmex WAM provide integration of sample data process management.

**Conveyor Extension**

Expandable Conveyor Extension allows an XN-9100 line to go around fixed objects. It is also used to bridge the rack flow when using the DI-60 module.

**Turn Unit**

The Turn Unit option is designed for improved flexibility, allowing advanced automation in smaller spaces.
Explore how we can take your lab beyond a better box

Sysmex truly understands the complex challenges hematologists are facing and will face in the future—and we will always be creating the means to solve them. Our Sysmex® XN-9100 Automated Hematology System is a giant step forward with automation that maximizes your laboratory’s capacity and productivity.

We work hard to ensure that Sysmex customers enjoy the greatest possible return on their investment. From implementation and training to ongoing maintenance and support, every step of our process has been engineered to reduce your operating costs, improve laboratory efficiencies and, above all, improve the lives of your patients.

To learn more about how we can help your laboratory move to the next level with Sysmex® XN-9100 Automated Hematology System, visit sysmex.com/us or call us at (800) 379-7639.