XF-1600™ Flow Cytometer

Expert Technology for Laboratories

Together for a better
healthcare journey

For Research Use Only. Not for use in diagnostic procedures.
RUO instruments must be validated before use in clinical practice.

XF-1600 Flow Cytometer

Sysmex, a global leader in hematology, urinalysis and hemostasis and a provider of trusted automated workflow solutions, now offers scientists a unique and innovative flow cytometry solution for robust data collection.

The XF-1600 integrates a multi-laser optical layout with Sysmex's proven fluidics design for a reliable flow cytometer performance. Stable fluidics—even at high sample acquisition rates—ensure the system is capable of rapid data collection and analysis with high sensitivity. The XF-1600 also provides the option of a lower sampling rate for increased measurement precision.

Designed for increased stability

Flexible specimen handling

Rare event analysis capability

Rapid data acquisition without loss of sensitivity

Intuitive software with automated QC and optional off-line analysis solution

Top-rated service sysmex is known for

Technology meets reliability

The XF-1600 uses innovative technology and fluidics to provide high detection sensitivity, even at high sheath velocity, allowing for rapid data acquisition. Like Sysmex's clinical testing platforms, the XF-1600 flow cytometer is backed by the exceptional service and reliability laboratories expect from a global leader in hematology.

- 37 measurable parameters simultaneously record signal-area, -height, -width and -time data from 12 detection channels
- Linear, log and logicle plots are available for data acquisition
- Complete array of quality control products with automated QC setup
- Proven Sysmex fluidics design

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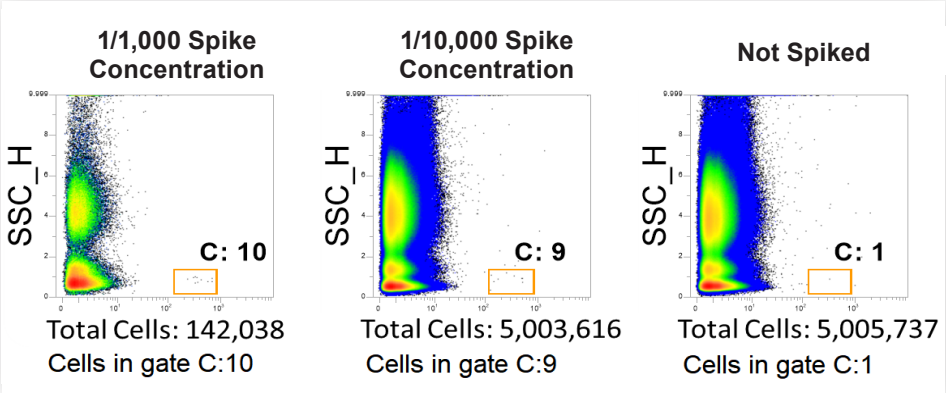
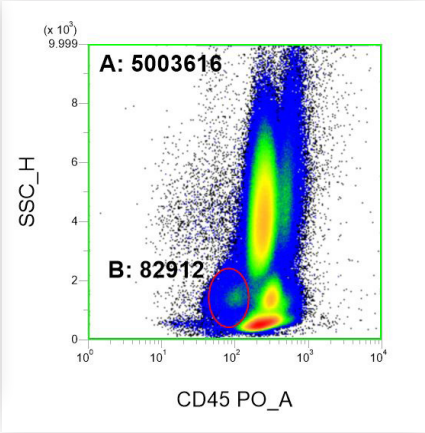
Powerful Rare Event Mode with excellent data resolution

With the growing interest for rare event analysis, the XF-1600 incorporates a Rare Event Mode (REM) based on established hematology technology. The system allows users a choice of six aspiration volumes which analyze up to 2 mL of specimen for low carryover and Limit of Blank (LoB).

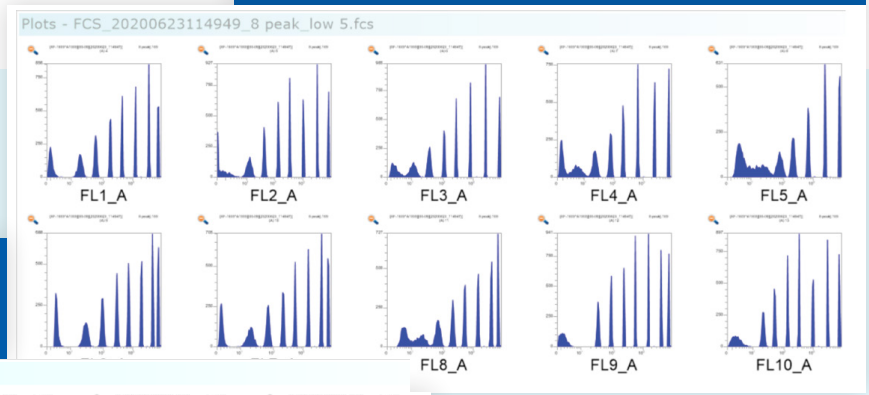




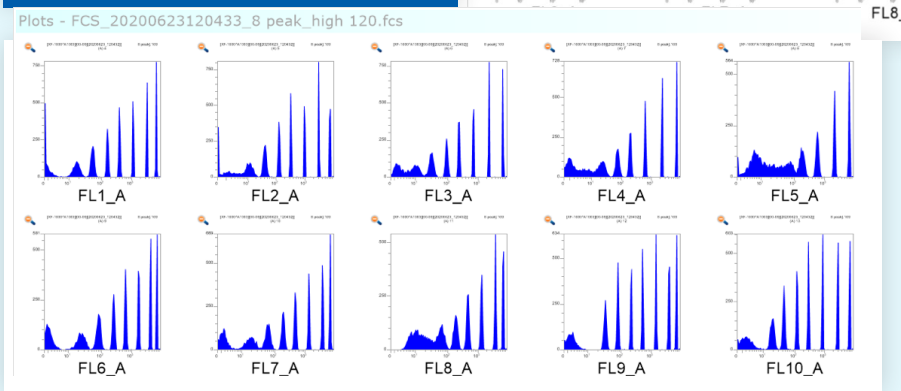
Five adjustable sample rates - from 5 µL/min to 120 µL/min - provide flexibility for all sample types, titer levels and cell concentrations. At high sheath velocity, fast data acquisition rates - up to 50,000 events per second - reduce the overall sample acquisition time while maintaining sensitivity required for rare event analysis.

Data acquisition rates up to 50,000 events per second reduce overall analysis time and provide an impressive 5 million events of robust data.

8 Peak Beads at 5 µL/minute flow rate



8 Peak Beads at 120 µL/ minute flow rate



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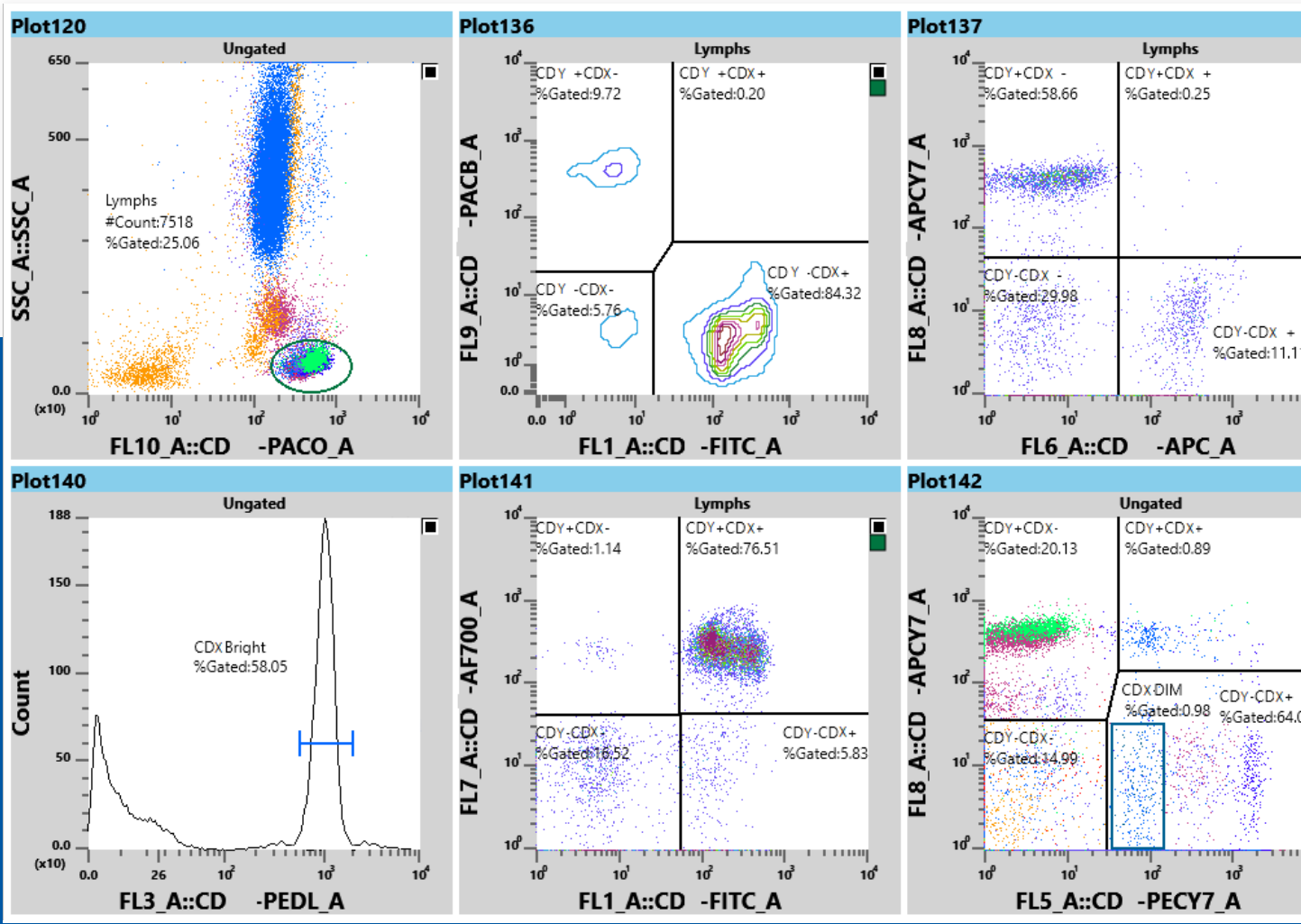
Intuitive XF-1600 software

Sysmex's intuitive user interface makes the XF-1600 easy to use for all lab staff. Choose from a variety of plot options including linear, log and logicle axis scaling for single or dual parameter plot types with selectable statistics.



Data is for representative purposes only. Complex tests must be validated by laboratories.

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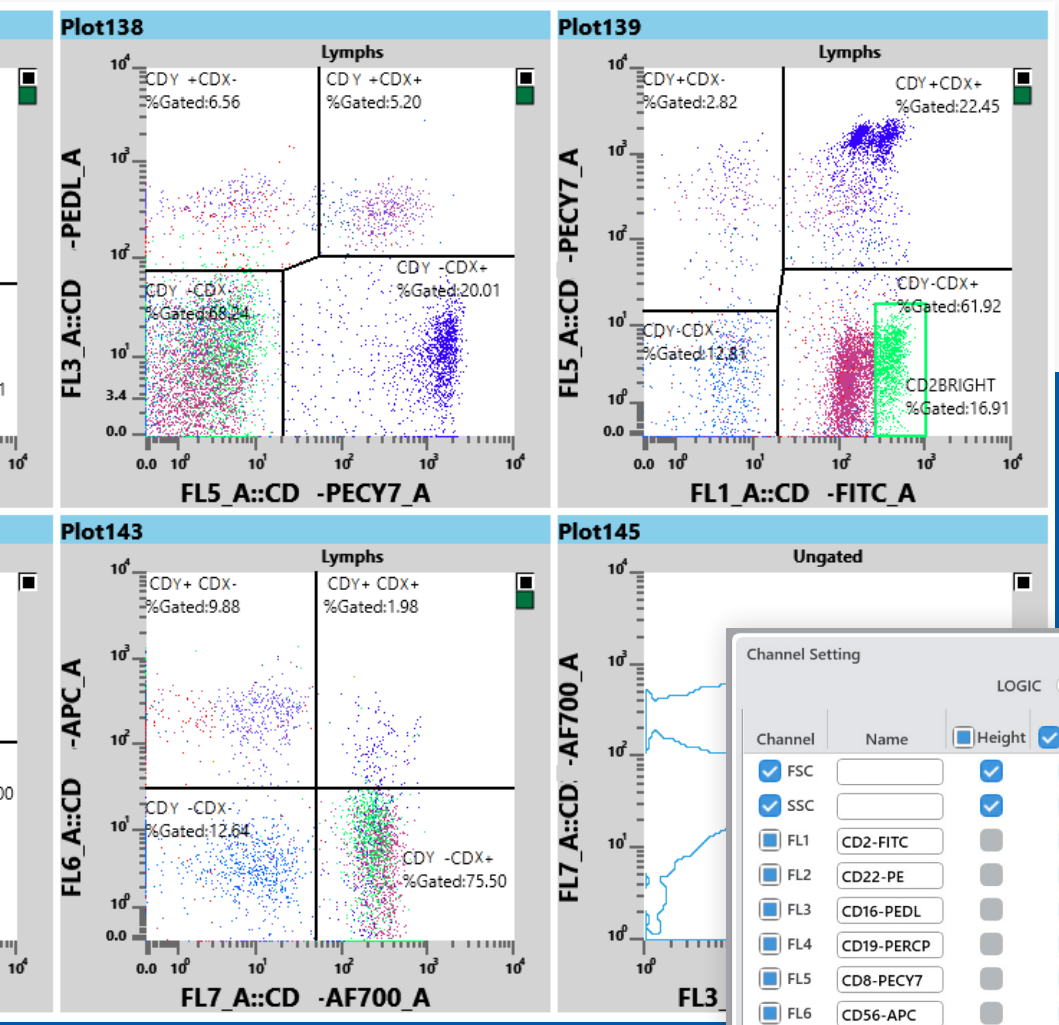

Variety of options for panel customization:

- Easy selection and input of channel settings
- Five different flow rates
- Volume selection of up to 2 mL
- Multiple stop settings based off event count or time

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A flexible approach to sample handling

XF-1600 shown with Helmer 24-tube rotor

If your valuable specimens require special attention, the XF-1600 provides unique sampling options. Single tube processing within the manual tube position can be performed on a variety of tube sizes with selectable aspiration volumes to ensure minimal sample waste and protection against accidental sample loss. Alternatively, samples can be loaded on a Sysmex compatible rotor for automated walkaway acquisition.

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Seamless integration

For exceptional efficiency, Sysmex offers additional options for streamlining workflow in the flow cytometry lab.

PS-10™ Sample Preparation System

The PS-10 Sample Preparation System automates many manual tasks associated with preparing flow cytometry samples, freeing up valuable time for techs. Additionally, it instills trust and confidence in data due to its excellent sample viability, high cell recovery and reproducible results.

Helmer UltraCW® II Automatic Cell Washing System

For procedures that include wash steps, the Helmer UltraCW II Automatic Cell Washing System integrates seamlessly into your flow lab processes. The barcoded rotors are compatible with the XF-1600 and PS-10, offering positive identification to ensure traceability through the laboratory.

VenturiOne® Software

VenturiOne offline analysis software provides high-speed processing of up to 400 data files, with unique and robust data previews that make plot creation simple and quick. Autogating, hyperlog slides and versatile color compensation put powerful analytics in your hands.

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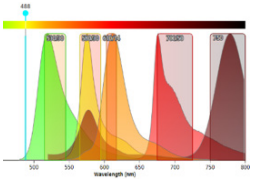
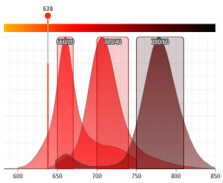
Specifications

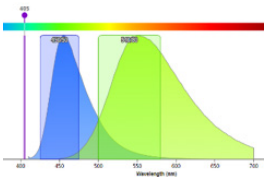
Principles and Technology	Standard single tube loading port and rotor-based autoloader with optional sample mixing capabilities 3 spatially separated lasers: 405 nm, 488 nm, and 638 nm Operating system (OS): Windows® 10 professional (64bit) FCS format 3.0
Fluorescence Detectors	10 fluorescent channels

Laser	Channel	Filter
488 nm	FL1	530/30
	FL2	580/30
	FL3	610/14
	FL4	700/50
	FL5	750 LP

Laser	Channel	Filter
638 nm	FL6	660/20
	FL7	720/40
	FL8	780/60
405 nm	FL9	450/50
	FL10	540/80







Sample Flow Rate	Low: 5 µL per minute Medium: 30 µL per minute and 60 µL per minute High: 90 µL per minute and 120 µL per minute
Sensitivity: MESF	FITC < 100 PE < 50 APC < 100 Particle Resolution - 0.5 µm on scatter and up to 50 µm
Features	Fast data acquisition rates up to 50,000 events per second and 5 million events from 37 parameters including height, area, width and time Carry-over at 0.1% in Standard mode PS-10 compatible
Dimensions and Weight	Approx. 27.5 (W) X 25.0 (D) X 29.0 (H) in., approx. 220 lbs 700 (W) x 630 (D) x 740 (H) mm, approx. 100 kg

Award Winning Service, Reliability and Training

For more than half a century, Sysmex has been providing diagnostic equipment to clinical labs around the globe. Years of experience utilizing flow cytometry principles in hematology and urinalysis instrumentation have led to the development of the XF-1600, our first flow cytometer for research use.

Sysmex is well known for providing best-in-class service and reliability alongside our superior technology. A robust training curriculum, including e-learning and live virtual instructor-led training (VILT), is provided by the award-winning Sysmex Center for Learning. Additionally, Sysmex's hematology systems consistently earn the Best Service, Best Customer Satisfaction and Best System Performance awards* from IMV ServiceTrak™ and nine of the top ten cancer care hospitals in the United States use Sysmex analyzers.†

***Source: https://imvinfo.com/press-room/imv-announces-the-first-wave-of-2023-imv-servicetrak-clinical-laboratory-awardees-at-aacc-2023/**
†Source: https://health.usnews.com/best-hospitals

For the Technical Assistance Center (TAC), call 1-888-879-7639. For Canada TAC, call 1-888-679-7639.

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