

# **NovoCyte**<sup>®</sup> Flow Cytometer

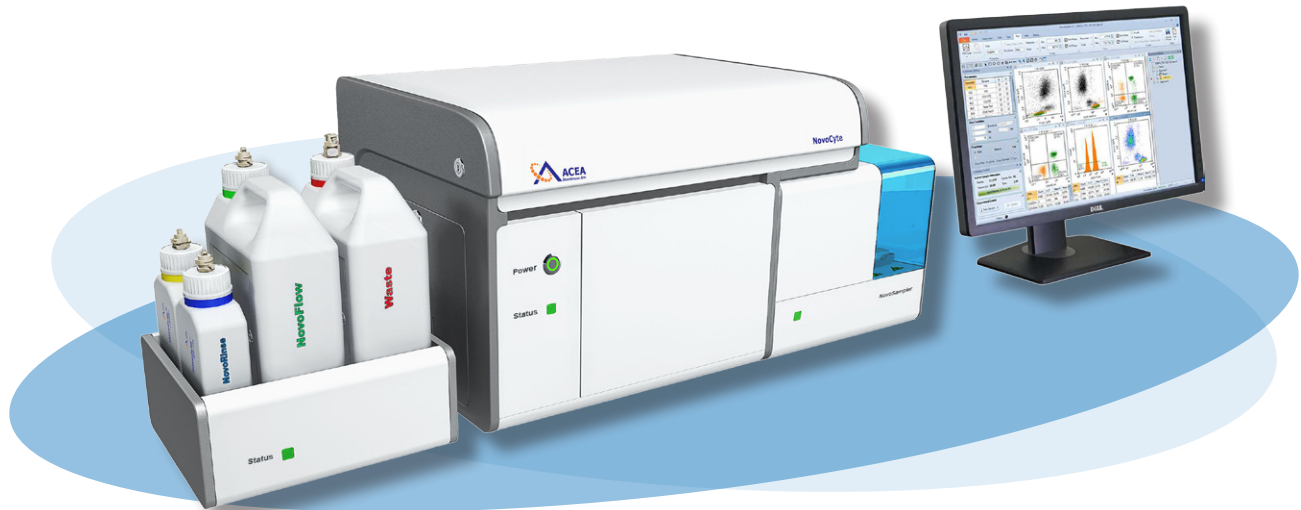


## Technical Specifications

# NOVOCYTE IS SIMPLY FOR EVERYONE

Research tools can be affordable and easy to use without sacrificing high performance over cost. Scientists can now address the full range of their current and future needs for multi-parameter flow cytometry analysis with the ACEA NovoCyte Flow Cytometer.

- **POWERFUL** - up to 17 parameter detection with enhanced sensitivity and resolution
- **INTUITIVE** - automated instrument maintenance functions and advanced data analysis capability for easy user interface.
- **CUSTOMIZABLE** - 1 to 3 laser options, exchangeable filters, multiple sampling options and flexible analysis formats.



## Configurable Laser Systems

### Standard Systems

Model Number		1000	2000R		2060R		3000			3005		
Lasers		488 nm	488 nm	640 nm	488 nm	640 nm	405 nm	488 nm	640 nm	405 nm	488 nm	640 nm
Detectors	445/45 nm						•			•		
	530/30 nm	•	•		•		•	•		•	•	
	572/28 nm	•	•		•		•	•		•	•	
	615/20 nm						•	•				
	660/20 nm									•	•	•
	675/30 nm	•	•	•	•	•	•	•	•			
	725/40 nm									•	•	•
	780/60 nm				•	•	•	•	•	•	•	•

### Yellow Laser Systems

Model Number		2100YB		3000VYB			3000RYB		
Lasers		488 nm	561 nm	405 nm	561 nm	488 nm	640 nm	561 nm	488 nm
Detectors	445/45 nm			•					
	530/30 nm	•		•		•			•
	586/20 nm	•	•	•	•	•		•	•
	615/20 nm	•	•	•	•	•		•	•
	660/20 nm	•	•	•	•	•	•	•	•
	695/40 nm	•	•				•	•	•
	780/60 nm		•	•	•		•	•	

# NovoCyte® Specifications

Optics	Laser Configuration	Spatially separated beams with 10 x 80 µm elliptical spots
	Optical Alignment Procedure	Fixed, no operator alignment required
	Flow Cell	170 x 290 µm rectangular quartz flow cell
	Scatter Resolution	0.2 µm
	Cell Size	0.2 - 50 µm
	Fluorescence Threshold Sensitivity	FITC < 75 MESF; PE < 50 MESF; APC <20 MESF
	Fluorescence Resolution	< 3% CV for CEN
Filters	User Exchangeable	
Fluidics	Sample Acquisition Rate	35,000 events/second
	Volumetric Absolute Count Precision	Syringe Pump: CV < 5%
	Sample Flow Rate	5-120 µL/min
	Sheath Flow Rate	6.5 mL/min
	Sample Aspiration Volume	10 µL - 5 mL
	Fluid Container Capacity	3 L sheath, 3 L waste, 500 mL cleaning, 500 mL decontamination
	Carryover	< 0.1%
Fluidics Maintenance	Automated startup, cleaning, decontamination and shutdown	
Data Processing	Parameters	Height and Area for FSC, SSC and all Fluorescence Channels, Width and Time
	Dynamic Range	24 bit; 7.2 decades logarithmic scale; no need for PMT voltage adjustment
	Compensation	Automatic compensation, manual compensation, visual compensation tools available for pre/post/live acquisitions
	Output Data Files	FCS 3.1, NovoExpress (.ncf), PDF reports, bitmap graphics, vector graphics, CSV
	Workstation	Dell OptiPlex 7040 SFF, 1 TB with 23.8" LCD monitor
	Computer Operating System	Microsoft Windows® 7 Professional (64 bit), Microsoft Office® 2016
Sampling	Software	ACEA NovoExpress®
	Manual Sample Loading	12 X 75mm tube, 1.5mL Eppendorf tube
Operating Conditions	Automatic Sample Loading	Optional - compatible with 12 x 75 mm tube, 1.5 & 2 mL tubes, "bullet" tubes in 96-pos. racks, 24-well, 48-well and 96-well microtiter plates
	Instrument Dimension (W X D X H)	23.6 x 17.7 x 15.4 in (60 x 45 x 39 cm)
	Instrument Weight	86 lb (39 kg)
	Power Requirements	100/115/230 VAC, 50-60 Hz
	Environment Requirements	Temperature: 15-32°C ; Relative Humidity: 80% maximum

\*Some specifications and performance claims were validated using certain conditions.

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# Compatible Fluorochromes

## NovoCyte® 3005 Channels

FL Channel	405nm						488nm				640nm			
	Pacific Blue™ Brilliant Violet 421	AmCyan Brilliant Violet 510	Pacific Orange™ Brilliant Violet 570	Qdot® 650 Brilliant Violet 655	Qdot® 705 Brilliant Violet 711	Qdot® 800 Brilliant Violet 785	FITC	PE	Cy5	PerCP eFluor70	PE-Cy7	APC	Alexa Fluor® 700	APC-Cy™7
445/45 nm	•													
530/30 nm		•					•							
572/28 nm			•						•					
660/20 nm				•					•			•		
725/40 nm					•					•			•	
780/60 nm						•					•			•

## NovoCyte® 3000 Channels

FL Channel	405nm						488nm				640nm		
	Pacific Blue™ Brilliant Violet 421	AmCyan Brilliant Violet 510	Pacific Orange™ Brilliant Violet 570	Qdot® 605 Brilliant Violet 605	Qdot® 655 Brilliant Violet 650	Qdot® 800 Brilliant Violet 785	FITC eGFP	PE	PE-Texas Red	PerCP 7-AAD	PE-Cy7	APC	APC-Cy™7
445/45 nm	•												
530/30 nm		•					•						
572/28 nm			•					•					
615/20 nm				•					•				
675/30 nm					•					•		•	
780/60 nm						•					•		•

## NovoCyte® 3000 RYB Channels

FL Channel	640nm			561nm				488nm					
	APC Alexa Fluor® 647	Alexa Fluor® 700	APC-Cy™7	PE	PE-Texas Red® mCherry	PE-Cy™5 mPlum	PE-Cy™5	PE-Cy™7	FITC eGFP	EYFP	Propidium iodide	PerCP 7-AAD	Per-Cy™5.5 CP-Cy™5.5
530/30 nm									•				
586/20 nm				•						•			
615/20 nm					•						•		
660/20 nm	•						•					•	
695/40 nm		•						•					•
780/60 nm			•										

## NovoCyte® 3000 VYB Channels

FL Channel	405nm						561nm				488nm			
	Pacific Blue™ Brilliant Violet 421	AmCyan Brilliant Violet 510	Pacific Orange™ Brilliant Violet 570	Qdot® 605 Brilliant Violet 605	Qdot® 655 Brilliant Violet 650	Qdot® 800 Brilliant Violet 785	PE tdtTomato	PE-Texas Red® mCherry	PE-Cy™5 mPlum	PE-Cy™7	FITC eGFP	EYFP	Propidium iodide	PerCP 7-AAD
445/45 nm	•													
530/30 nm		•										•		
586/20 nm			•				•						•	
615/20 nm				•				•						•
660/20 nm					•				•					•
780/60 nm						•				•				