NovoCyte® Quanteon Specifications

	Lasers	405nm	488nm	561nm	637nm
FL Channel	445/45 nm	•			
	530/30 nm	•	•		
	586/20 nm	•	•	•	
	660/20 nm	•	•	•	•
	695/40 nm	•	•	•	•
	725/40 nm	•	•	•	•
	780/60 nm	•	•	•	•
	Fluorescence Channels	8	7	6	5
	Optical Detection Capability	25 channels			

Optics	Laser	Solid state laser with on-board thermal-electric cooling and guaranteed thermal stability and beam quality
	Laser Beam Profile	10 x 60 µm elliptical beam
	Laser Operation	Laser only on when acquiring samples
	Optical Alignment Procedure	Fixed; no operator alignment required
	FSC and SSC Detection	Off 561 nm laser
	Fluorescence Detection	Silicon Photomultiplier (SiPM) with high photon detection efficiency; Individual photodector for each channel
	FSC/SSC Sensitivity	FSC: 0.4 µm; SSC: 0.2 µm
	Fluorescence Resolution	< 3% CV for CEN
	Optical Filters	User exchangeable, “Smart” filter automatically read by the system
Fluidics	Flow Cell	170 x 290 µm rectangular quartz flow cell
	Sample Acquisition Rate	50,000 events/second
	Sample Delivery	Positive-displacement syringe pump enabling direct volumetric absolute count without the need for reference counting beads.
	Volumetric Absolute Count Precision	< 5%
	Sample Flow Rate	5 - 120 µL/min, continuously adjustable
	Sheath Flow Rate	6.5 mL/min
	Sample Aspiration Volume	5µL - 5mL
	Compatibility to Autosampler	No fluidic tubing disassembly or re-connection required
	Fluid Level Sensing	Active sensing using weight sensors with automated warnings when any fluid level is out of specified range.
	Fluid Container Capacity	3 L sheath, 3 L waste, 500 mL cleaning, 500 mL rinse Optional large container for sheath (15 L) and waste (15 L)
	Carryover	< 0.1%
	Sample Injection Probe (SIP) Rinse	Automated flying collar wash of inner and outer SIP surface after each sampling
	Fluidics System Monitoring	In-line pressure sensor monitors the pressure in real time. Automated system recovery when pressure is out of range due to clogging.
	Fluidics System Maintenance	Automated startup and shutdown with fluidic system cleaning. Automated user executable cleaning, debubble, rinse, extensive rinse, unclog, priming, and decontamination.

Continue ⟶

Data Management	Software	ACEA NovoExpress™
	Parameters	Height and Area for FSC, SSC and all Fluorescent Channels, Width off FSC, Time
	Dynamic Range	24 bit; 7.2 decades logarithmic scale
	Fluorescence Photodetector Gain Control	User adjustable, optimized, default gain setting for each individual channel
	Compensation	Full inter-beam matrix, during or post acquisition
	Output Data Files	FCS 3.1; CSV; Batch pdf reports
	Data Report	Automatic report. Customizable report. Batch report.
	Workstation	Intel core i7 processor. 8G RAM. 1T Hard drive. Small form factor. Optional higher configuration workstation.
	Monitor	23.8 inch flat panel (1,920 x 1,200 resolution)
	Computer Operating System	Microsoft Windows® 7 Professional (64 bit) with Microsoft Office® pre-installed
	Usage Monitor	Comprehensive Transaction Log and System Log.
	User Management	Administrative creation of individual user accounts and user groups with privilege control. Configurable roles for individual users. User operation time tracking.

NovoSampler® Q

NovoSampler® Q Specifications	Physical Parameters	Dimension (W X D X H)	16.9 X 11.0 X 11.8 in (43 X 28 X 30 cm)
		Weight	29.3 lbs (13.3kg)
		Operating Temperature	15 °C - 30 °C
		Operating Humidity	Relative Humidity 80% maximum
		Power Requirements	Automated self-calibration after installation.
	Installation	Installation Method & Calibration	No need to reconfigure fluidics tubing or connection. Automated self-calibration after installation.
	Performance and Capability	Labware Compatibility	40 tube rack for 12 x 75mm tube, 24-well, 48-well, 96-well (flat, U-, V-bottom), and 384-well microtiter plates
		Labware Calibration	Automated well bottom depth mapping and calibration to accommodate different labware. Calibrated labware template can be saved for future use.
		SIP Collision Detection	Automated fluidics system recovery after detection of SIP collision; automatic acquisition of the next sample after successful recovery.
		Carryover	< 0.1 %
		Mix Mode	Orbital shaking up to 3000 rpm. User definable mixing freqeuncy, speed, acceleration, and duration.
		Bar Code Reading	Integrated barcode reader. Automatically prompt barcode as specimen name in the software.
		Fluidics System Rinse	Automated post-sampling rinse for every sample. User definable extra rinse cycle and rinse frequency.
	Workstation	Operating System	Microsoft Windows® 7 (64 bits)
		Software	ACEA NovoExpress®