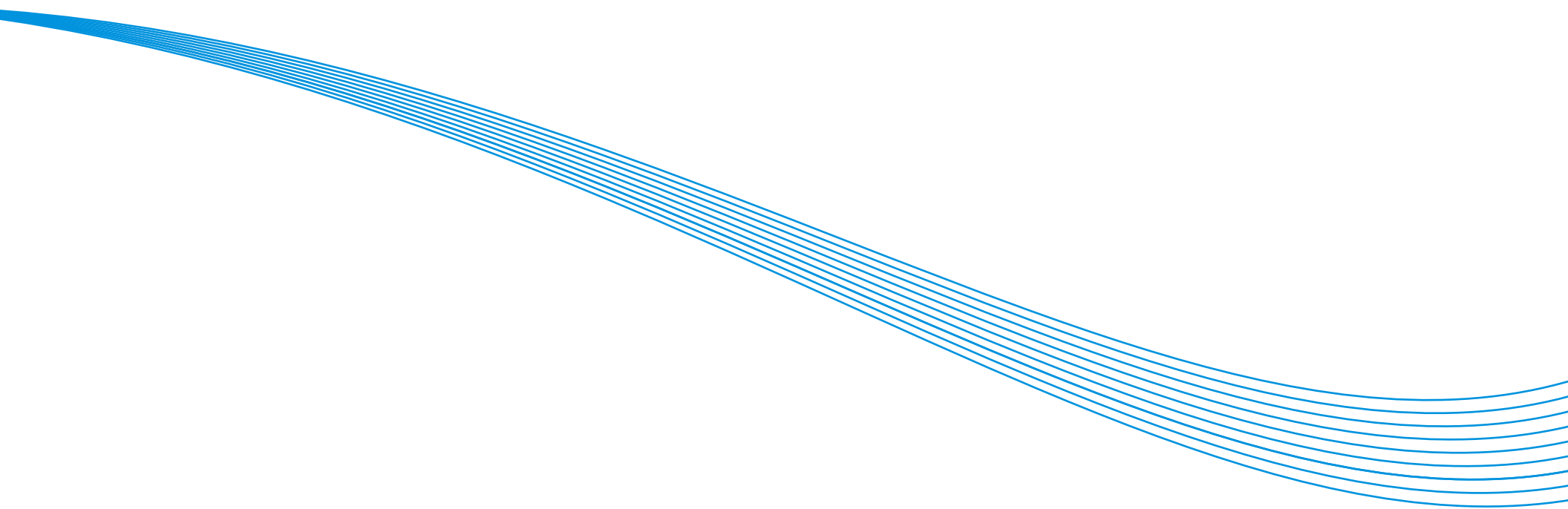





Stratedigm

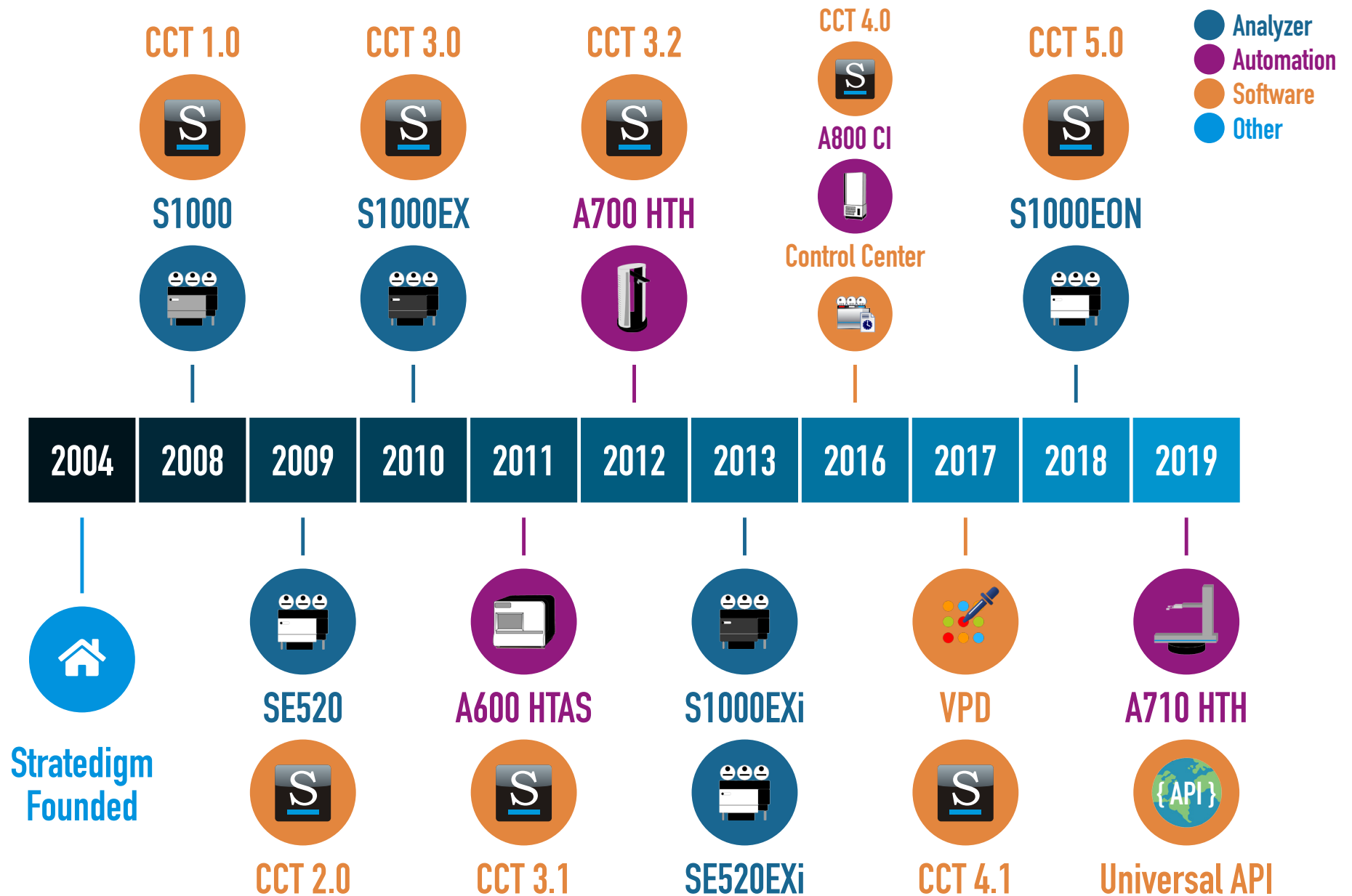
Cytometry Without Compromise



11 REASONS CUSTOMERS CHOOSE STRATEDIGM

- 
- one** Customizable: Configurable & upgradeable up to 6 lasers, 30 parameters in a 21"x21" footprint
 - two** Future-proof: more than 11 years of future-proof, non-obsolescent design.
 - three** Our service: 95% of issues are resolved remotely in < 20 minutes.
 - four** Reliability: 1/10th the parts. Fewer parts, lower cost, and higher reliability.
 - five** Rugged design: work out of the box after being shipped as passenger luggage.
 - six** Automation: 24/7 unattended automation all under a single software package.
 - seven** Our software: Incredibly powerful, user-friendly software from novice to poweruser.
 - eight** Repeat customers: 85% of customers return for a major purchase.
 - nine** Adoption: Stratedigm is adopted at some of the most prestigious labs in the world.
 - ten** Our references: our systems are never placed in exchange for favorable reviews.
 - eleven** Made in the USA: Our cytometers, plate loaders, and movers are designed, tested, and manufactured in Silicon Valley, CA, USA.

STRATEDIGM PRODUCT HISTORY





Stratedigm

In an era of disposable cytometers, Stratedigm is making obsolescence a thing of the past. Since its founding in 2004, Stratedigm has designed fully customizable, upgradeable, scalable benchtop flow cytometry instruments. For more than a decade, we've continued to pursue our passion for building the best possible instruments that grow with you and your applications.



Service & Warranty

We take great pride in our service. We utilize industrial IoT to solve 95% of issues in minutes. And Stratedigm offers a standard two-year warranty with every S1000, A600 HTAS, and A710 HTH.



Sensitivity & Resolution

The S1000EON flow cytometer has a TRUE 5-decade dynamic range. In tandem with our patent laser-trimming technology and a dedicated microparticle mode, you can detect particles from 0.2 μm to 6 μm all in the same sample.



Ease of Use

We believe that a user-friendly software is essential to any great flow instrument. With CellCapTure, our full analysis and acquisition software, we made it possible to run a single tube or run hundreds of 384-well plates with just a few clicks.



Configurable & Scalable

Every lab has different needs and budgets. Our S1000 cytometers are completely customizable at time of purchase and field-upgradeable. Configure your system with up to 6 lasers and 30 parameters running single tubes or add automation and run hundreds of plates with ease.



Future-Proof

We've engineered a field-upgradeable and backwards compatible series of flow cytometers. The unique patented architecture of Stratedigm's products allows for flexible, incremental upgrades to your S1000 series flow cytometer—now or in the future.

SELECTION WITHOUT COMPROMISE

Value Without Compromise

10 parameters, 2 lasers

Based on the same proven technology as the S1000 series, the SE520EXi offers a fixed configuration system with 2 lasers and 10 parameters at an unbeatable value.



SE520EXi

Performance Without Compromise

Up to 30 parameters, 6 lasers

Stratedigm's S1000EON (pronounced "S-1000-eon") cutting-edge 4th generation flow cytometer is built to provide you with the ultimate in scalability and performance. The breakthrough result is an exceptional analyzer with patented optics, fluidics, and electronics configurable with up to 6 lasers and 30 parameters. Its industry-leading sensitivity enables the S1000EON to resolve dim events, making it the perfect choice for microparticle analysis and other demanding applications.



S1000EON

Automation Without Compromise

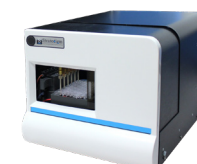
24/7 unattended automation

Stratedigm's automation suite ensures seamless compatibility and effortless workflow from experiment design to acquisition and analysis. Whether you run a few tubes or hundreds of plates, Stratedigm's A600 High Throughput Auto Sampler, A710 High Throughput Hotel, and A800 Cell Incubator will make your job as effortless as possible while putting automated cytometry at your fingertips.



A710 HTH

A800 CI



A600 HTAS





INNOVATION WITHOUT COMPROMISE

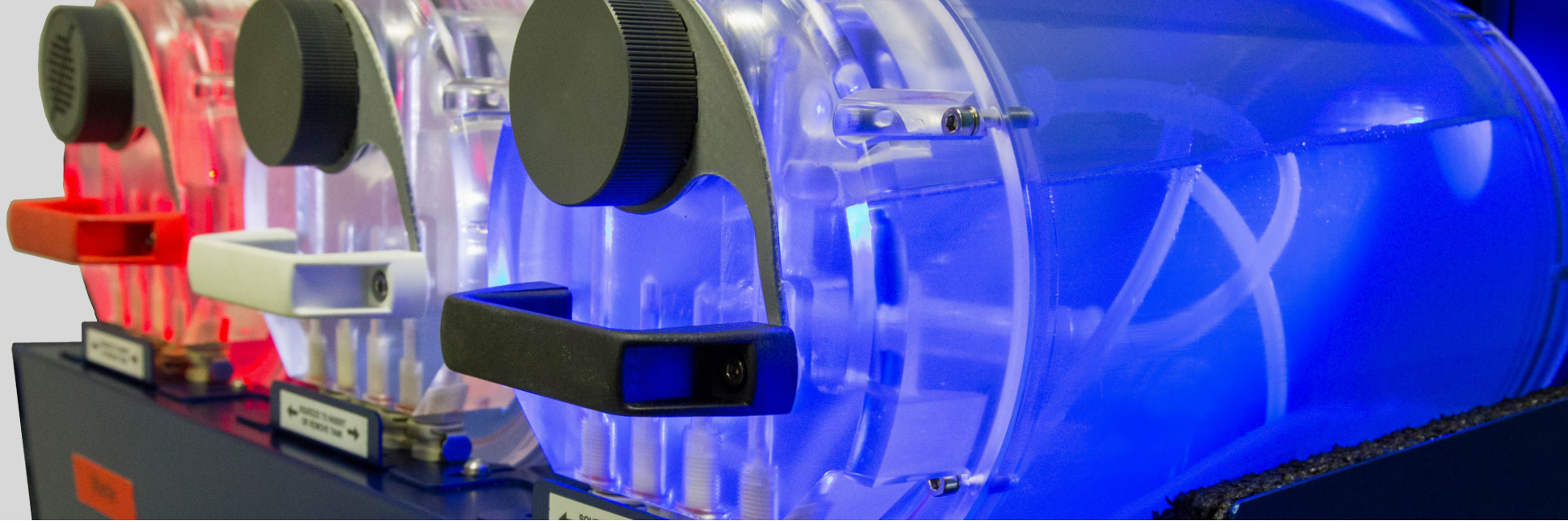
Revolutionary Optics

Stratedigm's cytometers employ the most advanced optical design on the market. Wavelength-specific focusing optics deliver laser light to the core stream with unparalleled efficiency. Our patented OptiSymmetric™ excitation architecture yields the most compact, rigid, and configurable 6-laser optical bench available. By simultaneously using the front and back sides of a vertically oriented optical plate, up to 6 lasers can be mounted for an optimal configuration and long-term stability.

Stratedigm's instruments are designed based on two fundamental goals: to create the most reliable flow cytometry systems and to ensure the best quality and most reproducible data on the market. Our relentless pursuit has resulted in a design with one-tenth the part count of a conventional analyzer, yielding our "order of magnitude advantage" in reliability.

Our emission module (pictured to the right) houses patented 3rd generation Smart Detect™ technology. The Smart Detect™ architecture provides unsurpassed performance at a fraction of the size, cost, and complexity of conventional designs. It enables the detection of up to four fluorochromes by the same detector, while allowing for independent gain adjustment for each color.





Revolutionary Fluidics

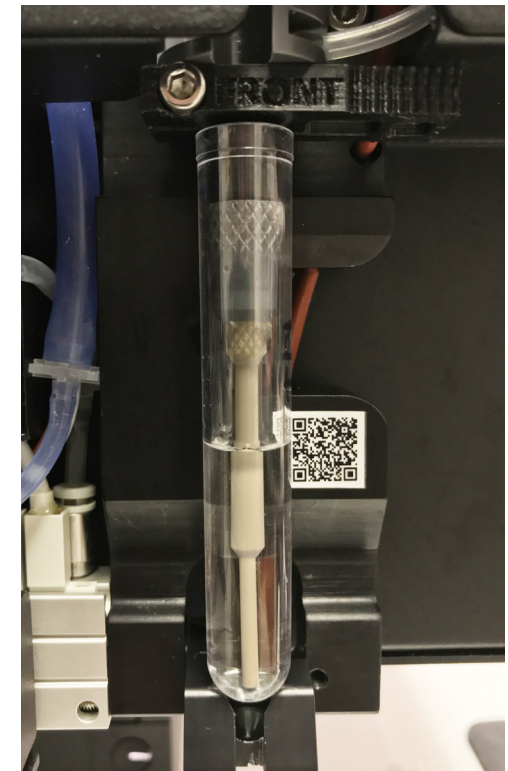
Stratedigm's patented Iso-Pressure fluidics allows for sample flow rate control while using one pressure system for both sheath and sample lines. Parting with 40 years of conventional fluidics design, Stratedigm's Iso-Pressure fluidics revolutionizes one of the most critical sub-systems in flow cytometers by reducing part count, cost, and complexity.

Fluidics Tanks

Stratedigm's fluid tanks are a perfect example of how we challenge convention to enhance the user experience. Housed on top of the instrument, fluid tanks can be viewed easily and replaced without having to disconnect tubes or sensor cables. And with transparent tanks, you can easily monitor the fluid levels of your tanks.

Dynamic Seal

Stratedigm's patented Dynamic Seal design simplifies test tube insertion and removal while improving ergonomics and allowing for a wider range of sample tube options. This unique architecture eliminates friction between the test tube and its seal. And, samples can be left on the cytometer without being diluted or consumed when the system is not acquiring data.





Revolutionary Electronics

The S1000EON electronics were designed to be truly scalable, capable of easily increasing the number of colors without imparting a cost penalty on more basic configurations. The result was a breakthrough approach to signal processing with unmatched sensitivity and ultra-low thresholding capabilities critical for dim signal and microparticle analysis. Each circuit board with Stratedigm's hybrid digital design is about the size of a notepad and can process more than 26 parameters while drawing less than 30 watts of power.

Stratedigm's newest generation of electronics brings revolutionary changes:

- True 5-decade dynamic range
- Ghost Detect™: measure background fluorescence of your buffer fluid
- 3rd generation Smart Detect™ technology: allows for four colors to be processed simultaneously with a single photomultiplier tube (PMT)
- Unmatched low-end sensitivity

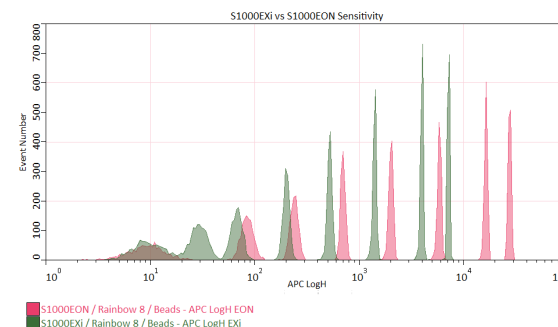


S1000EXI VERSUS S1000EON

A New Eon of Flow Cytometry

How do you make the best better? We took our proven technology from our S1000EXi and made major improvements that are incredible leaps forward for flow cytometry. Third generation Smart Detect™, second generation Laser Trimming™, and fourth generation signal processing electronics are only some of the new groundbreaking changes we put in the S1000EON. And, we achieved all of these new changes in the same footprint—at same price point. That's truly Cytometry Without Compromise™.

	EXI	EON
Max # of Lasers	4	6
Max # of Parameters	22	30
Decades - Acquisition	4	5
Decades - Analysis	6	7
Interrogation Points	3	4
FSC Channels	1	4
SSC Channels	2	2
Event Rate	Up to 10,000/sec	Up to 20,000/sec



Before joining [Biological Industries Israel], I served as the Sr. Core Lab Director for Weizmann Institute for more than 30 years...I've been methodically monitoring [the S1000EON's] performance on a daily basis for over 3 months. I'm measuring the sensitivity everyday with Rainbow 8 Peak beads, like they do on every instrument [in the Weizmann Flow Cytometry Core Lab]. And this instrument is one of the best, if not the best, instruments I've operated in my career.

*Eitan Ariel
Weizmann Institute of Science*



S1000EXi

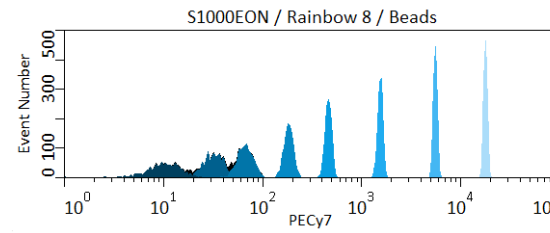
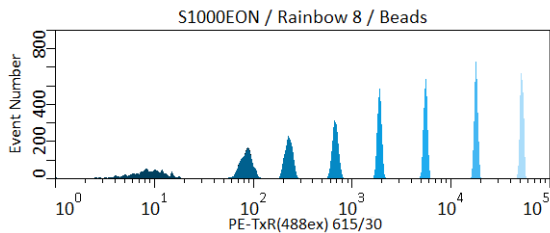
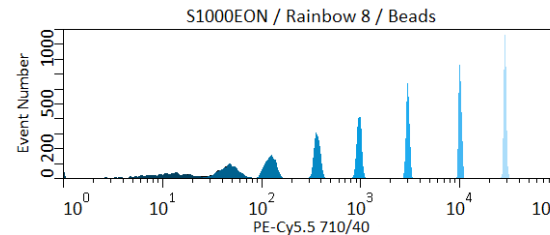
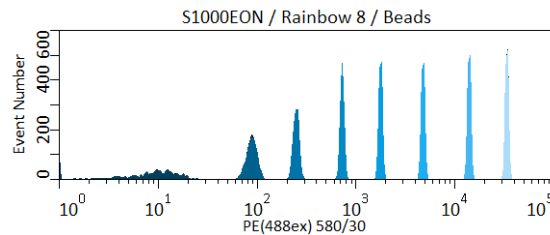
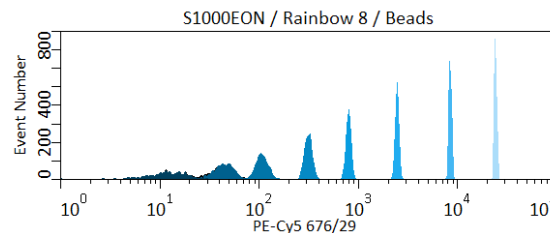
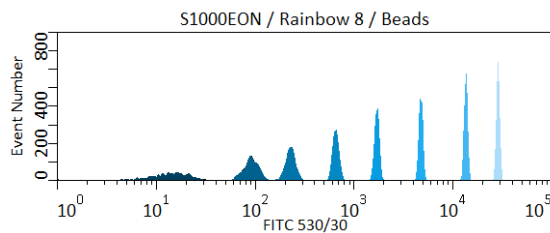


S1000EON

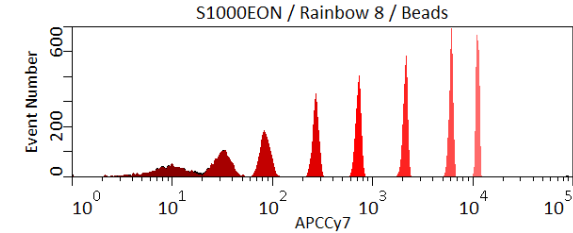
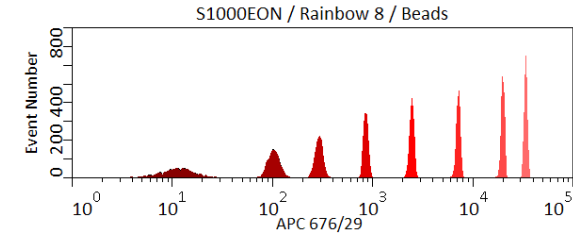
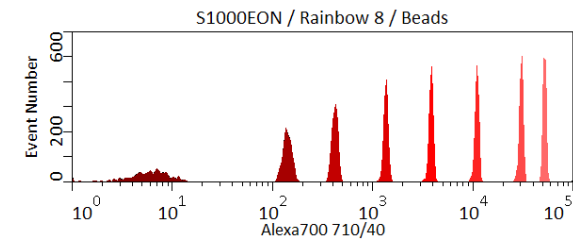
PERFORMANCE WITHOUT COMPROMISE

Our cytometers provide unmatched results in a benchtop package. With a true 5-decade dynamic range powered by our electronics, you can place stained and unstained populations anywhere on scale without the need for costly beads and cumbersome software algorithms to optimize PMT voltages.

488 nm Laser



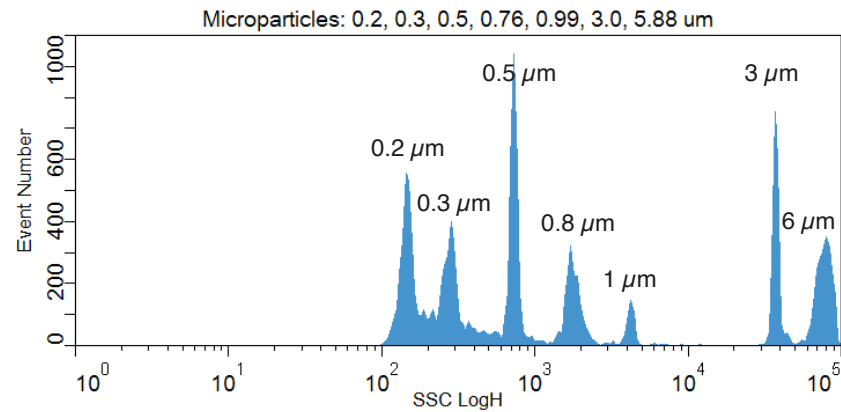
640 nm Laser



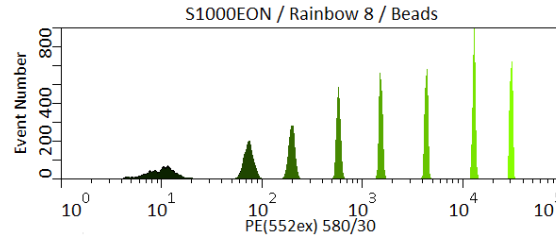
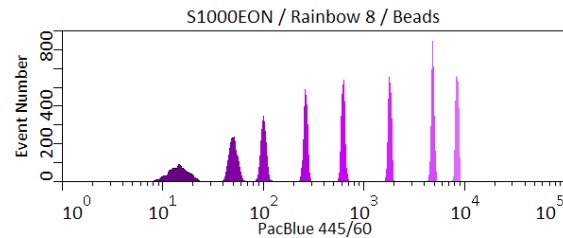
*Data collected on Stratified S1000EON S/N - S1400EONBRVG07072013-50 with upgraded Pyro-Red detector.

Dedicated Microparticle Mode

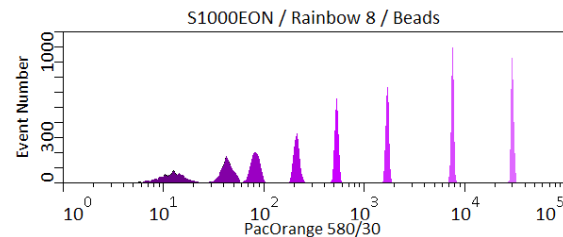
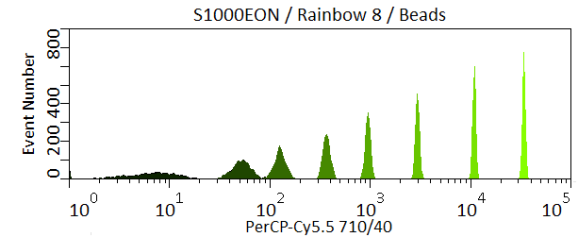
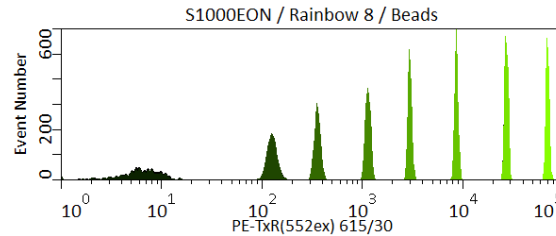
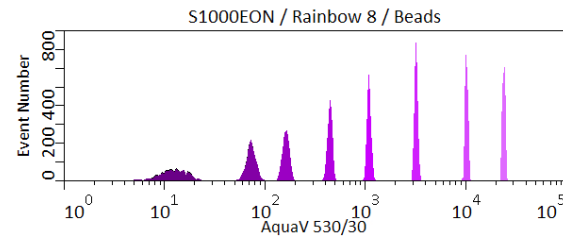
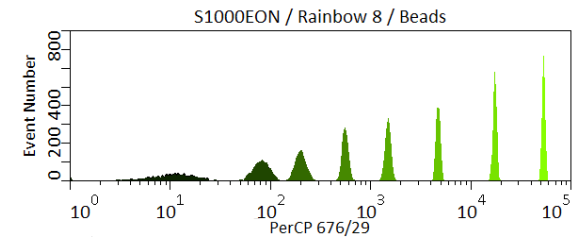
A dedicated microparticle mode powered by Stratedigm's patented Laser Trimming™ technology enables accurate counting and analysis of a wide range of particle sizes with 3 decades of dynamic range on our scatter channel used for triggering. When in normal mode, users can measure a maximum cells size up to 130 μm .

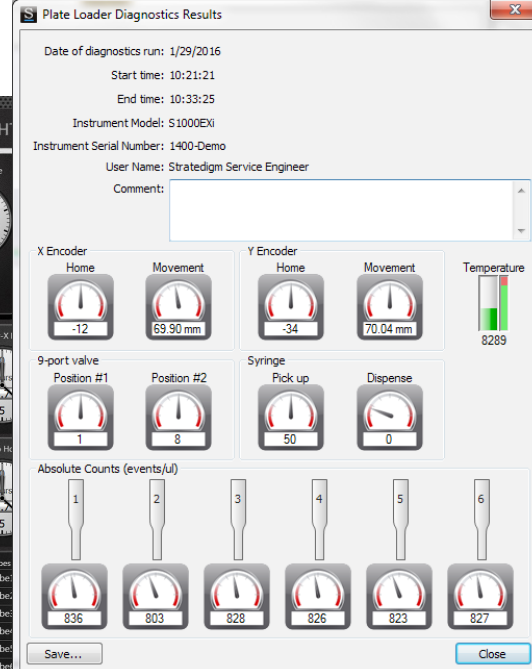
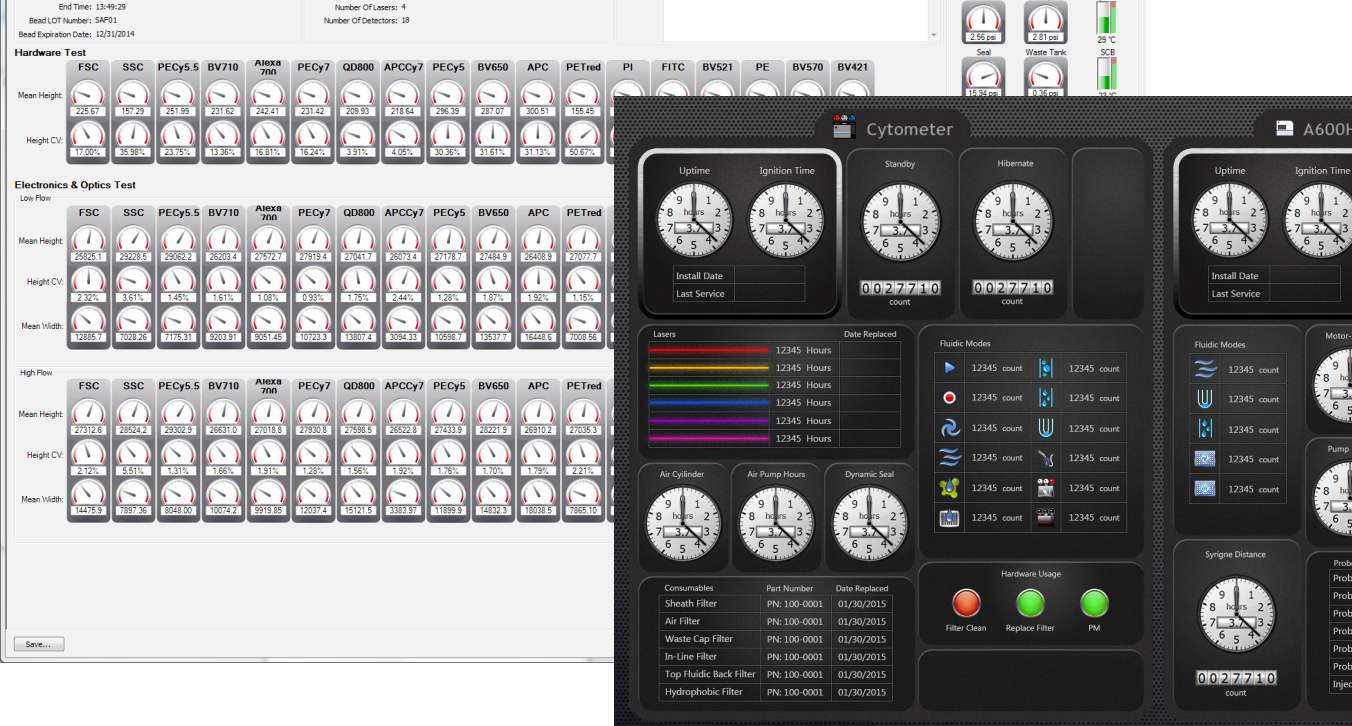


405 nm Laser



552 nm Laser





RELIABLE. RUGGED. TRUSTED.

Reliable

Laboratories worldwide rely on Stratedigm flow cytometry equipment to provide the high-quality results they need, day after day. Reliable by design, Stratedigm's flow cytometers protect your investment from the inside out. Critical components used in every Stratedigm cytometer are housed and protected by an expanded polypropylene (EPP) shell, resulting in excellent optical alignment, shock resistance, and vibrational stability.



"We've had our Stratedigm S1000EX since 2017 here at the National University of Singapore (NUS). Since then, we've experienced excellent customer care from Stratedigm...Our instrument has been very productive, super reliable, and provides us with excellent data."

Daniel Tan Wan Shun
National University of Singapore

Rugged

Knowing that each component of your system is properly maintained and regularly inspected is important. CellCapTure's new Control Center allows you to verify each component's usage at a glance and allows Stratedigm's engineers to proactively replace near end-of-life components—avoiding downtime.



"This is the 2nd Stratedigm unit that I have used. We purchased the current S1000EXi together with the A600 HTAS and A700 Hotel [in 2016], so far the system has gone through more than 300 experiments, consumed over 500 liters of sheath fluid, the total runtime has passed over 4300 hours, and the unit is still STRONG. It's hard to believe that all this can be achieved by using any other brand of flow cytometer."

Hui Shao, Adicet Bio

Trusted

Rest assured that the integrity of your data comes first. Stratedigm's automated, built-in diagnostics provide a comprehensive system check to ensure your instruments are operating in peak condition.



"The S1000EON is in high demand as part of our flow core facility, and has been reliable and performed consistently with class-leading sensitivity and resolution. Although we are based overseas, getting prompt and efficient engineering support has never been an issue, and a 99.94% uptime with over 87k acquisitions since its installation in 2015 speaks tremendously to Stratedigm's fast response time and reliable cytometers."

Cameron Nowell
Imaging, FACS and Analysis Core
Monash Institute of Pharmaceutical Sciences
Monash University, Melbourne, Australia

FLEXIBILITY WITHOUT COMPROMISE

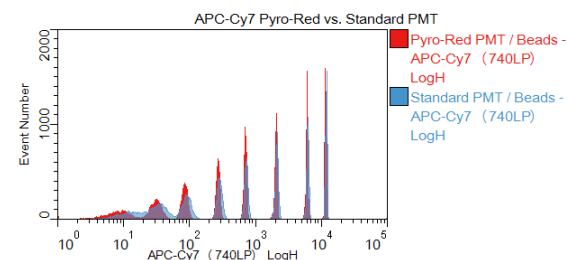
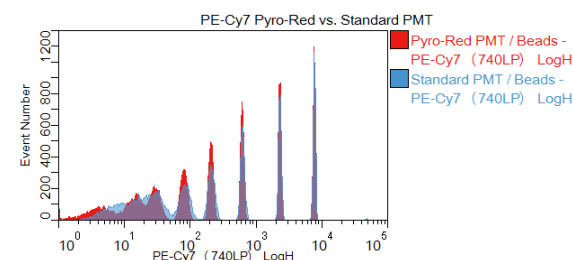
The S1000EON gives you ultimate configuration flexibility, allowing you to choose up to 6 lasers from 8 available wavelengths and 30 parameters. Matching your budget at the time of purchase and expanding for future upgrades just got simpler!

372 nm - Near-UV (75 mW)	405 nm - Violet (100 mW)	488 nm - Blue (150 mW)	532 nm - Green (100 mW)
BUV395 (405/20) DAPI (440/40) BUV496 (530/30) BUV563 (580/30) BUV661 (676/29) BUV737 (725/40) BUV805 (780/60)	BV421 (440/40) DAPI (440/40) BV480 (530/30) BV510 (530/30) BV570 (580/30) BV605 (615/30) BV650 (676/29) BV711 (725/40) BV750 (780/60) BV786 (780/60)	FITC (530/30) PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) RFP (615/30) PE-Cy5 (676/29) PerCP (676/29) PE-Cy5.5 (725/40) PerCP-Cy5.5 (725/40) PE-Cy7 (780/60)	PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) RFP (615/30) PE-Cy5 (676/29) PE-Cy5.5 (725/40) PE-Cy7 (780/60)
552 nm - Olive (100 mW)	561 nm - Yellow (100 mW)	640 nm - Red (100 mW)	805 nm - IR (100 mW)
PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) PE-Cy5 (676/29) PE-Cy5.5 (725/40) PE-Cy7 (780/60)	PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) PE-Cy5 (676/29) PE-Cy5.5 (725/40) PE-Cy7 (780/60)	APC (676/29) Alexa700 (725/40) APC-R700 (780/60) APC-H7 (780/60)	Alexa790 (810LP) BUV805 (810LP)

Scatter and PMT Upgrades

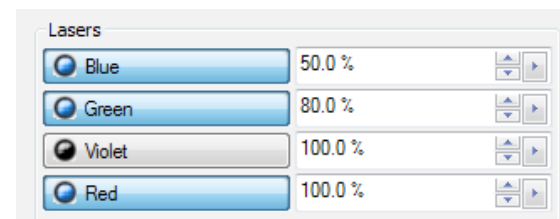
Detect scatter and fluorescence the way that works best for you. Stratedigm provides several upgrades to make your system even more flexible:

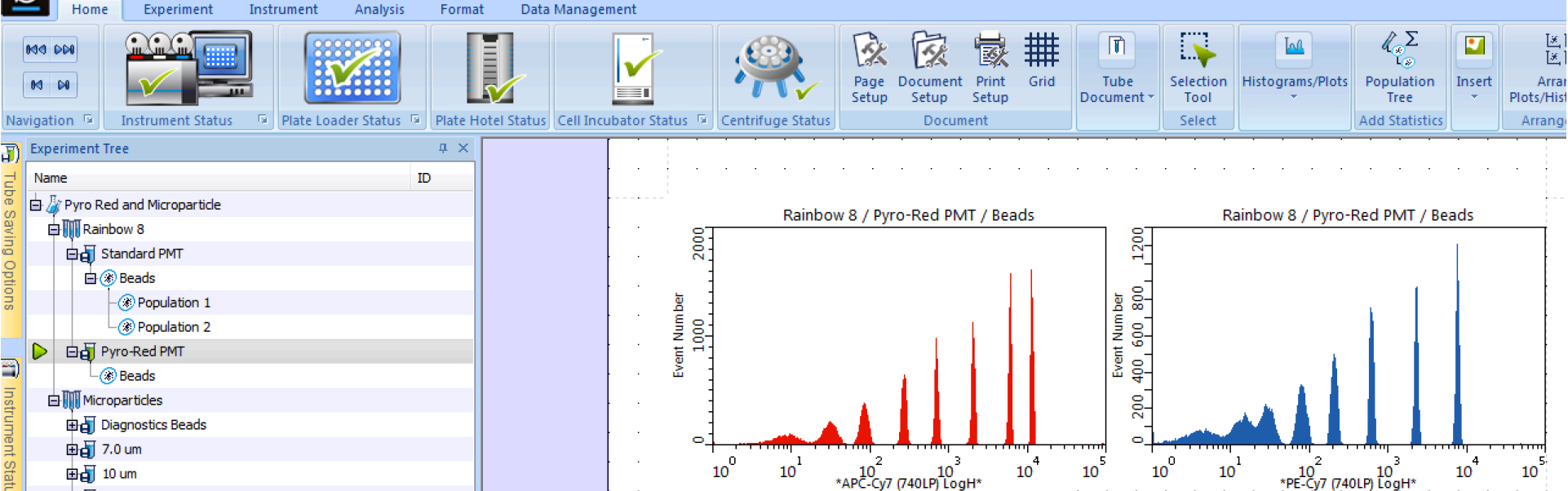
- Configure your system to collect side scatter from the 488 and/or the 405 nm lasers.
- Upgrade the FSC photodiode (PD) to a FSC PMT to increase your FSC sensitivity
- Quad-FSC (FSC measured from up to 4 lasers): 375, 405, 488, and/or 640 nm
- Upgrade your far-red sensitivity with Stratedigm's Pyro-Red™ detector (sample data below)



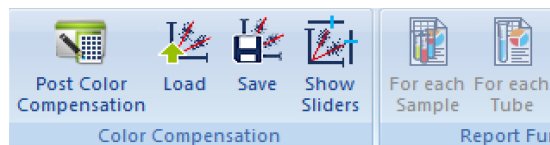
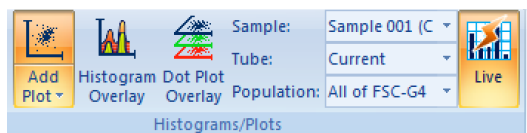
Laser Power

Take full control of your lasers and adjust laser power from 100% down to as low as 30%—without 3rd party software. From experiment to experiment or from tube to tube, turn lasers on and off to customize your results.





SOFTWARE WITHOUT COMPROMISE



Simple, Intuitive Interface

A simple, intuitive, and familiar user interface allows beginners and experts alike to quickly design complex experiments.

Full Analysis Capabilities

Full analysis capabilities include post-color compensation, batch analysis, calculation sheet, custom parameters, overlays, import/export of FCS data, and more.

Append Mode

Append mode allows users to append data to already recorded tubes and wells. Each run is timestamped and gated for easy identification between runs.



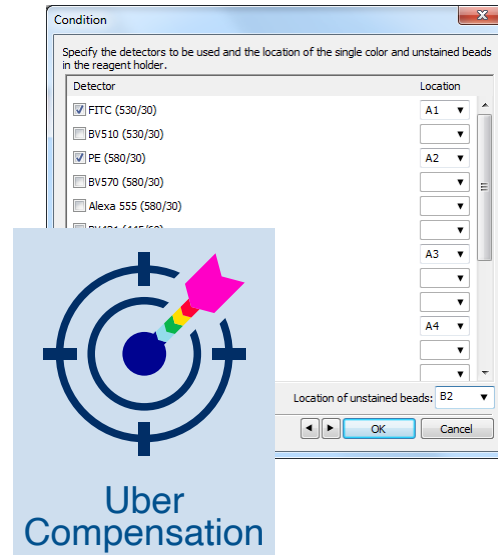
Ghost Detect

Stratedigm's Ghost Detect™ mode enables the measurement of the background fluorescence of a sample without the need for an optical trigger.

Ease of Use

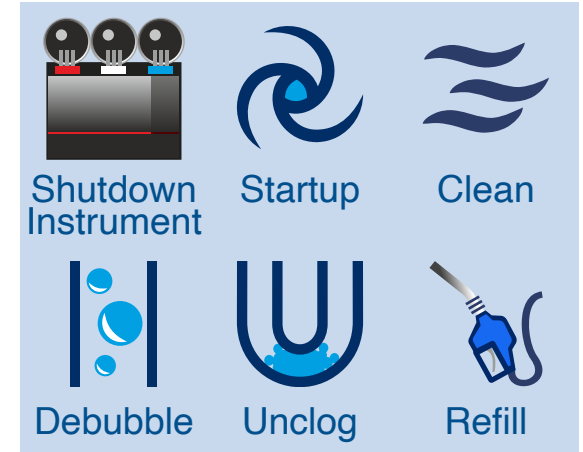
From running conventional flow cytometry analysis to complex high throughput experiments, Stratedigm's CellCapTure™ software gives you unmatched experiment flexibility and ease of use.

- Familiar interface: powerful, yet approachable graphical user interface (GUI) makes for easy training.
- Adaptive icons: predictive and intuitive home ribbon provides you with the tools you need when you need them.
- Save time and money by doing offline experiment design from a separate laptop or PC.
- Import, export, or auto-export FCS files.



Auto-Compensation

To utilize CellCapTure's Uber Compensation™, simply select the parameters to be compensated—CellCapTure will do the rest: tubes, plots, PMT gains, positive/negative gate creation, and compensation overlap percentages are all optimized and generated automatically.



Built-In Maintenance Modes

Built-in automated maintenance and fluidics modes simplify instrument care. The unattended, automated shutdown procedure:

- Cleans the instrument
- Saves the experiment
- Backs up the database
- Refills the sheath tank
- Exports data as FCS
- Sends a completion email
- Exits the software
- Shuts down the computer



[Stratedigm's acquisition and analysis software] CellCapture has a very intuitive user-interface that allows me to quickly train new students and users on the system, while offering rich and powerful data analysis capabilities. Our users are big fans of the Stratedigm and the easy-to-use software."

*Dr. Orit Sagi-Assif
Tel Aviv University*



AUTOMATION WITHOUT COMPROMISE

Stratedigm's automation suite is built with you in mind. By controlling all the steps in high throughput flow cytometry, you can quickly and easily run complex, multi-plate experiments. The automation suite's design is based on the same principles as our flow cytometers—innovative, compact, and flexible.

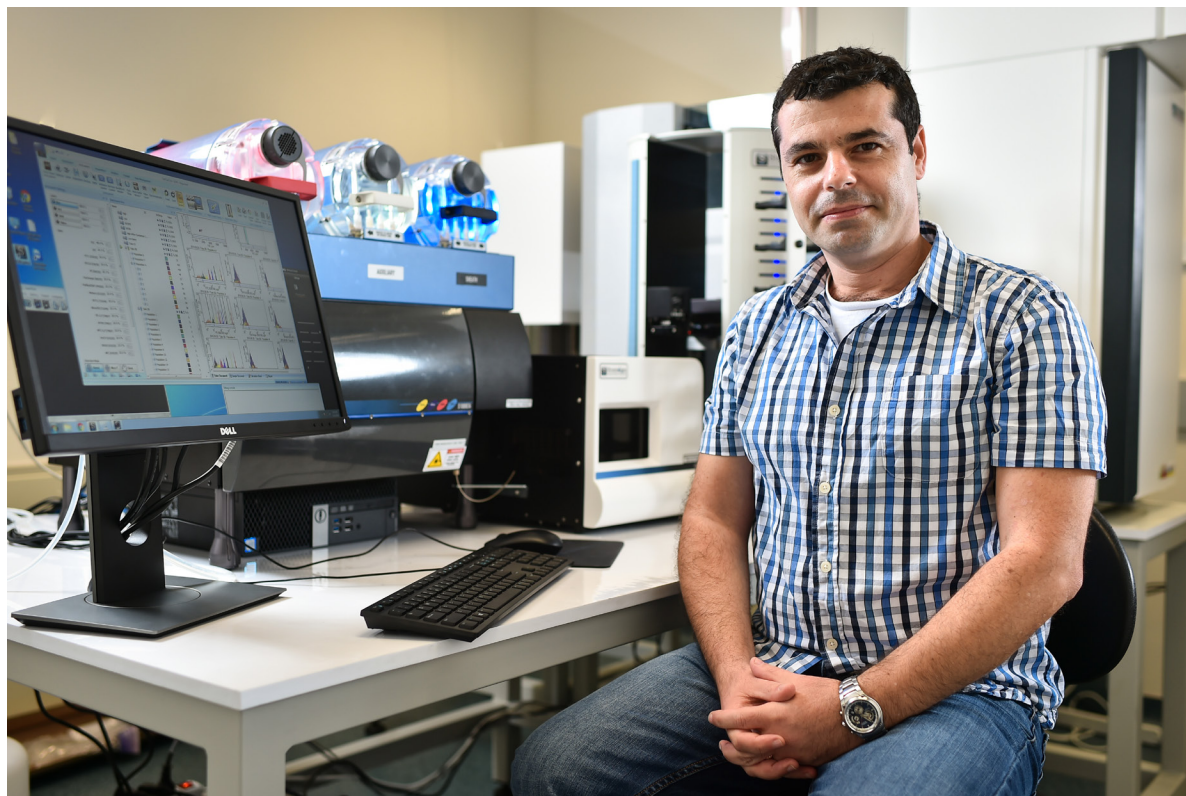
The A600 High Throughput Auto Sampler (HTAS) does away with hardware limitations inherent to existing plate loaders, offering lightning fast acquisition speeds through our Flat-6 injection™ technology. It provides liquid handling functions for

automated titration and reagent addition, absolute volumetric counting, extended sample aspiration volumes, and the widest range of carrier compatibility.

The A710 High Throughput Hotel (HTH) enables high traffic labs to run unsupervised multi-plate experiments overnight to truly maximize throughput. Capable of accommodating up to 320 plates, the A710 HTH can run samples back-to-back for several days without the need for supervision. Set your experiment up on Friday at 5 P.M. and have over 30,000 wells recorded and analyzed by Monday morning.

The A800 Cell Incubator (CI) gives users complete control of the incubation environment (temperature, humidity, CO₂, shaking) of up to 44 plates. Users can even arrange several A800 CI's to create multiple working environments for various samples.

Stratedigm's A600 HTAS, A710 HTH, and A800 CI allow for complete sample prep and automation. Complex flow cytometry automation has never been this simple.



Expanding Infrastructure

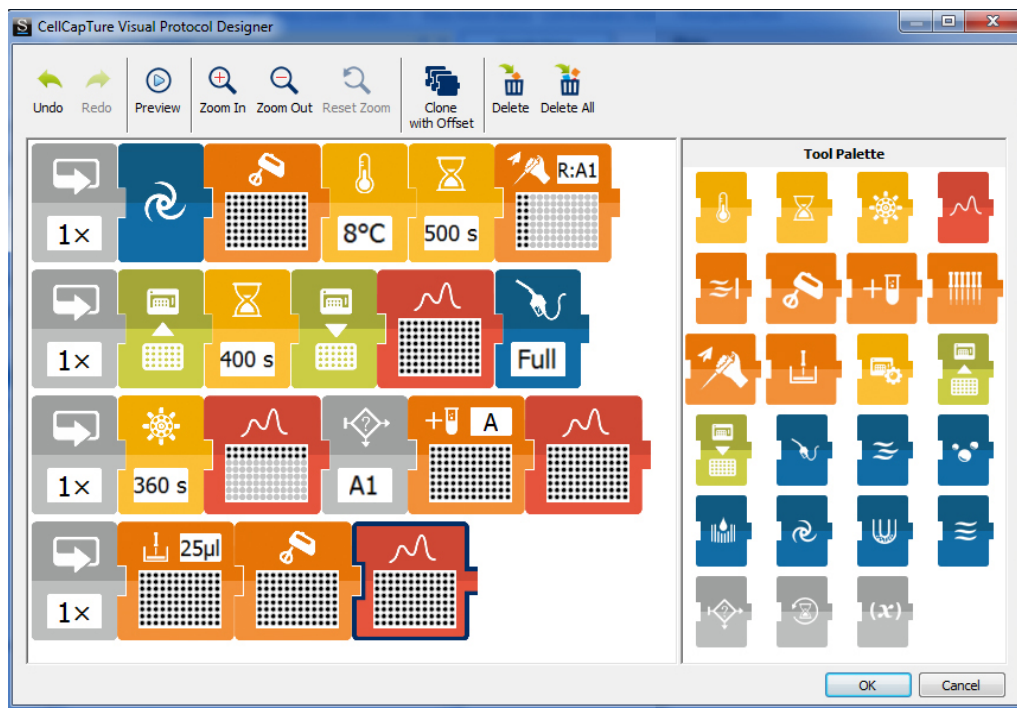
CellCapTure allows for full automation expansion. Non-Stratedigm cell incubators, liquid handlers, plate movers, and other automation accessories can be integrated to work together effortlessly and seamlessly using Stratedigm's built-in universal API.

Does your lab already have existing automation? Stratedigm and its team will work with you to integrate third party automation to fully integrate into CellCapTure. Even when using third party automation, you can still use Stratedigm products completely independently, leaving your system flexible!



After using the Stratedigm at Harvard Medical School for over 3 years, we decided to work with Stratedigm again at Technion. We were excited about harnessing Stratedigm's universal API to communicate with Tecan liquid handler 'EVOware' software. After thorough coordination, Stratedigm did a great job integrating all 3rd party software with its CellCapTure software allowing for a fully integrated automation suite.

*Dr. Yonatan (Yoni) Savir
Department of Physiology, Biophysics, and
Systems Biology
Technion - Israel Institute of Technology*



Easy Experiment Design

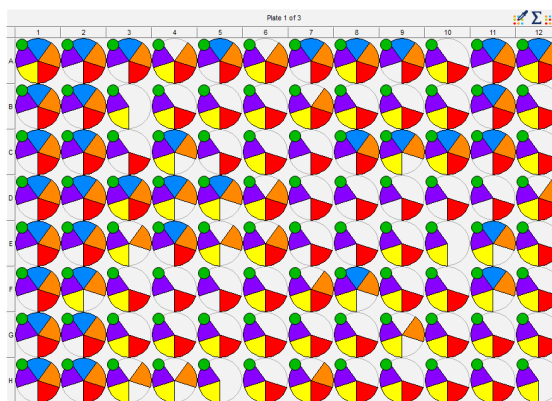
Creating the perfect, fully automated experiment is just a few clicks away. Easy template usage makes repeating and running routine applications painless and straightforward.

Multi-Experiment Record

Load your A710 with multiple plates from different experiments and queue them into the Multi-Experiment Record (MER). The MER allows users to either append or run completely independent experiments without user intervention.

Heat Map

Easily create heat maps with up to 5 simultaneous statistics to quickly visualize and analyze plate statistics at a glance.



Visual Protocol Designer (VPD)

Stratedigm is reinventing the way you design your automation experiments. With CellCapTure's patented Visual Protocol Designer (VPD), users can easily create complex tasks and protocols to fully automate their experiments to their exact specifications by utilizing a visual, drag-and-drop environment.

By utilizing “action blocks” for mixing, waiting, incubating, refilling, recording, adding reagents, and pipetting from well-to-well in conjunction with references and conditional logic blocks, users can now create complex protocols with ease. Create multiple loops or a single protocol to take all the guess work out of flow cytometry workflows. With Stratedigm's VPD, users are just a few clicks away from creating their perfect experiment.

U.S. Patent No. 10338897B2



[Aperture Bio is] an early-stage medical diagnostic company applying proprietary chemistry to a clinical high-throughput assay using the Stratedigm platform. And the VPD software component has been a true game-changer to our assay development process. The ability to change multiple parameters in minutes, assess their effect, and then make subsequent adjustments leading towards assay optimization—all without cumbersome and slow software code modifications—has been a dream. After using the VPD software, I can't imagine doing it any other way.

*Matt Gombrich
Chief Medical Officer
Aperture Bio*

PROTECTION WITHOUT COMPROMISE



Instrumentation Protection

Every Stratedigm S1000 cytometer, A600 HTAS , A710 HTH vcomes standard with a 2-year warranty. At Stratedigm, we firmly believe our innovative and breakthrough technologies to be the best investment for any lab. And with our best-in-class warranties, we stand proudly behind our products.

Investment Protection

Customize your cytometer based on your lab's current requirements and budget, while maintaining the flexibility of field-upgrading your system in a matter of hours to a powerful 6-laser, 30-parameter S1000EON. And with over a decade of backwards compatibility between models, your Stratedigm cytometer will continue to serve you for years to come.

Protocol Protection

Whether you developed your current protocols with an earlier model Stratedigm cytometer or our newest release, "full methods compatibility" means you will be running your samples with no need for adjustments to your assay protocols. Full automation can also be implemented into an existing system to further expand the potential of a Stratedigm flow cytometer. Stratedigm products have seamless integration of automated high throughput technology, instrumentation, and software that delivers the utmost productivity.



We purchased a 4-laser, 3-spot, 17-color Stratedigm S1000EXi in 2015 and recently field upgraded to a 4-laser, 4-spot, 21-color S1000EON. The ability to upgrade to the latest specification was an important factor in our decision to go with Stratedigm. Knowing we can currently go up to 6 lasers and 30 parameters and even more in the future is perfect for our growing needs.

Angus Johnston, PhD
Monash Institute of Pharmaceutical Sciences
Monash University, Melbourne, Australia



[UT Southwestern Medical Center in Dallas] began using the Stratedigm S1000 in 2013. Since its installation, Stratedigm has provided our team with invaluable support.

Katrina Mar
UT Southwestern Medical Center, Dallas, TX

VERSATILITY WITHOUT COMPROMISE

Research, pre-clinical, or industrial applications—no matter what the challenge, Stratedigm's suite of products is versatile and powerful enough to handle anything that comes its way. From core labs to research labs, Stratedigm cytometers and automation are right at home. Have complete peace of mind with our future-proof design that will keep your lab running the latest technologies for years to come.

Core Labs and Research Labs



- Immunophenotyping
- Multi-color analysis
- Microparticles
 - Lysosomes
 - Platelets
 - Extracellular Vesicles
 - Minicells
- Nanoparticles
- High throughput
- Protocol optimization
- Time courses

Pharma and Drug Discovery



- High throughput screening
- High-content screening
- Time courses
- Drug susceptibility
- 24/7 operation
- Walk away operation

Microbiology



- Food safety
- Drug susceptibility
- Time courses
- Trace microbial detection

Industrial



- Bacterial colony detection/optimization
- Enzyme production
- Reagent quality control
- Probiotic quality control

Pre-Clinical




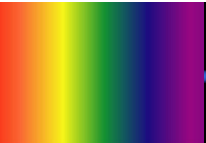
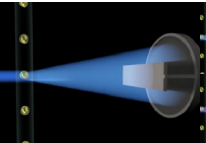
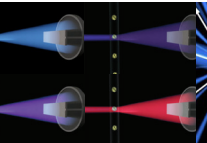
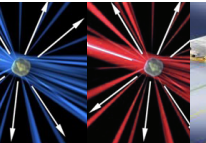

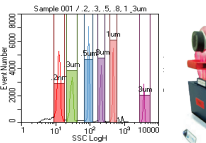

- Pathogen classification
- Multi-step assays for pre-clinical including sample prep
- Multi-step analysis incorporating conditional logic
- Time courses







Agriculture



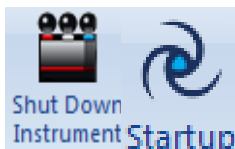
- Pesticide screening
- Spore analysis
- Ploidy
- Algae research
- Probiotic Research

POSSIBILITIES WITHOUT COMPROMISE

	Basic 2 Laser, 6 Color Analysis	6 laser, Polychromatic Analysis (7-30 Parameters)	FSC PMT Upgrade	Quad-FSC: 375, 405, 488, and/or 640 nm	Dual SSC: 488 and/or 405 nm	Scalability (Laser and Colors)	Hyper-Dynamic Scatter Range 0.2 μm to 7 μm	Integrated Fluidics
								
S1000EON	✓	✓	✓	✓	✓	✓	✓	✓
SE520EXi	✓						✓	✓

	Absolute Volumetric Counting	Automated Titration	Digital Temp Control and Automated Heat Studies	Liquid Handling	Expanded Fluidic Tank Capacity	Wide Array of Plate Types Supported
						
A600 HTAS	✓	✓	✓	✓	✓	✓
A710 HTH						✓
A800 CI			✓			✓

Automated
Shutdown/Startup



High Throughput
and Automation
Ready



Optional Barcode
Scanner



Remote Instrument
Control



Built-in QC and
Remote Support



Expanded Fluidic
Tank Capacity



Best-in-class
2-Year Warranty



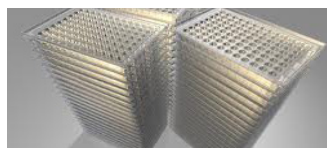
S1000EON



SE520EXi



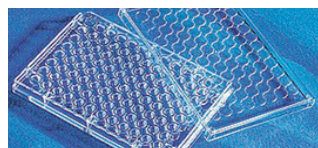
Multi-plate Support



Integrated
Barcode Scanner



Automated Delidding
Procedures



24/7 Automated
Operation



Multi-plate Experiment for
Time Courses



A600 HTAS



A710 HTH



A800 CI



S1000EON

Flow Cytometer

Up to 6 Lasers, 30 Parameters,
21" x 21" Footprint



When we heard about the S1000EON's release [in the US], we jumped at the opportunity to be one of the first adopters. So, we field-upgraded our 4-laser, 14-color, 3-spot S1000EXi to a 4-laser, 20-color, 4-spot S1000EON. Knowing that our systems can always be upgraded when the latest Stratedigm technology comes out is awesome. It's easily saved us hundreds of thousands of dollars. I would definitely call these systems 'future-proof'.

Jim Henthorn

*Research Assistant III, Flow & Imaging Lab Manager
Oklahoma University Health Sciences Center*



True Investment Protection

The S1000EON (pronounced "S-1000-eon") ushers in a new age of future-proof flow cytometry. Gone are the days of discontinued service of instruments and obsoleted hardware, both of which diminish return on investment (ROI). Stratedigm's unlimited upgradeability is unrivaled in the market today. No matter when you purchased your S1000 cytometer, you can be confident that you will have access to the latest innovations via field upgrades. The Stratedigm S1000EON integrated and modular design ensures that the architecture is functionally open-ended and that upgrading is simple and economical. Given the diversity of applications and dyes available today, the ability to customize your cytometer to your research needs is essential. True to its name, the S1000EON will propel your research for many years to come.



Brilliant In More Ways Than One

From the S1000EXi, the S1000EON increases the number of parameters from 22 to 30 and lasers from 4 to 6. It also doubles the throughput, increases the dynamic range to 5 decades, creates more spatially separated interrogation points, and boosts sensitivity up to 300%! All of these major improvements are in the same footprint and at the same price as our 1st S1000 launched in 2008. This is our commitment to Cytometry Without Compromise™.



Continuous Availability

Uptime is an important consideration when purchasing a cytometer and this is Stratedigm's highest priority. Our S1000EON is based on the technology we have been developing since 2004—a tried-and-true architecture that ensures the ultimate in reliability. Start with the optical bench: the patented, single plate "unibody" construction is the underpinning of a rugged design that performs to spec even if moved or jostled. The unique expanded polypropylene (EPP) enclosure eliminates vibrational and temperature-related instability—as an added bonus it reduces weight and part count. Automated software routines for startup, shutdown, and other tasks keep the instrument at the ready, while continuous software monitoring of key subsystems alerts you when attention is needed...before it becomes a problem. Our industrial IoT-based Remote Diagnostics can relay critical performance statistics to our service center—improving service levels and uptime, and decreasing costs. The S1000EON is ready when you are.

Lasers

This system is designed to support up to 6 lasers with 4 points of interrogation.

- 372 nm – 75 mW
- 405 nm – 100 mW
- 488 nm – 150 mW
- 532 nm – 100 mW
- 552 nm – 100 mW
- 561 nm – 100 mW
- 640 nm – 100 mW
- 805 nm – 100 mW

Other laser wavelengths and powers available by request.

Detector Parameters/Data Acquisition

- Dynamic Range: 5 decades for acquisition, 7 decades for analysis
- Linearity: $R^2 > 99\%$

Forward Scatter (FSC) – enables separation of unfixed platelets from noise.

- FSC resolution: < 500 nm polystyrene beads
- FSC scales: log and linear
- FSC parameters: width, peak height, area
- Optional FSC photomultiplier tube (PMT) detector
- Optional Quad-FSC: 375, 405, 488, and/or 640 nm

Side Scatter (SSC) – resolves lympho-, mono-, and granulocytes.

- SSC resolution: < 200 nm polystyrene beads
- SSC scales: log and linear
- SSC parameters: width, peak height, area
- Optional Dual-SSC: 405 and/or 488 nm

Parameters

- Maximum number of parameters: 30
- Sensitivity: < 80 MESF
- Fluorescence resolution: < 2.5% CV
- PMT scales: log and linear
- PMT parameters: width, peak height, area

Analysis Rate and Carryover

- Maximum analysis rate: up to 20,000 events/sec
- Carryover: <0.1%, with automatic backflush between samples

Fluidics Tray

- Integrated fluidics tray does not increase footprint of the instrument
- Automated startup, shutdown, and cleaning cycles
- Automated decontamination procedure using on-board cleaning solution for all components in contact with sample
- Tank capacity: 4 L sheath, 4 L waste, 4 L auxiliary solution
- Optional expanded fluidics tank for automated filling of sheath and drainage of waste tanks

372 nm - Near-UV (75 mW)	405 nm - Violet (100 mW)	488 nm - Blue (150 mW)	532 nm - Green (100 mW)
BUV395 (405/20) DAPI (440/40) BUV496 (530/30) BUV563 (580/30) BUV661 (676/29) BUV737 (725/40) BUV805 (780/60)	BV421 (440/40) DAPI (440/40) BV480 (530/30) BV510 (530/30) BV570 (580/30) BV605 (615/30) BV650 (676/29) BV711 (725/40) BV750 (780/60) BV786 (780/60)	FITC (530/30) PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) RFP (615/30) PE-Cy5 (676/29) PerCP (676/29) PE-Cy5.5 (725/40) PerCP-Cy5.5 (725/40) PE-Cy7 (780/60)	PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) RFP (615/30) PE-Cy5 (676/29) PE-Cy5.5 (725/40) PE-Cy7 (780/60)
552 nm - Olive (100 mW)	561 nm - Yellow (100 mW)	640 nm - Red (100 mW)	805 nm - IR (100 mW)
PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) PE-Cy5 (676/29) PE-Cy5.5 (725/40) PE-Cy7 (780/60)	PE (580/30) PE-CF594 (615/30) PI (615/30) mCherry (615/30) PE-Cy5 (676/29) PE-Cy5.5 (725/40) PE-Cy7 (780/60)	APC (676/29) Alexa700 (725/40) APC-R700 (780/60) APC-H7 (780/60)	Alexa790 (810LP) BUV805 (810LP)

Other dyes and filters available upon request.

Sample Input

- Dead volume: < 8 μ L
- Minimum sample volume: < 20 μ L
- Maximum particle size: up to 40 μ m polystyrene beads and up to 130 μ m cells
- Patented low insertion force single tube loading

Operating Conditions

- Operating conditions:
 - 60–86 °F (15–30 °C)
- Size (including fluidics tray):
 - 21.5" W x 21" D x 24" H
 - 54.6 cm x 53.3 cm x 61 cm
- Weight (including fluidics tray):
 - < 74 lbs (35 kg)
- Power:
 - 110/115/230 VAC, 50–60 Hz



SE520EXi

Flow Cytometer

2 Lasers, 6 Colors



Stratedigm's flow cytometry automation suite has been one of the most exemplary, comprehensive, and reliable FC systems that I have dealt with in my 12 year experience. At the core of each of our FC systems is an SE520 and they have been perfect for us. Their high sensitivity and performance have been crucial to our applications.

*Shawn Ramsaroop
Senior Research Scientist
Aperture Bio*



Power Within Your Budget

The first family of Stratedigm analyzers were designed specifically for essential applications. Continuing that legacy, Stratedigm's SE520EXi series gives uncompromised performance for flow cytometer users who run demanding, routine applications—without cutting corners. When you're looking for the perfect fixed configuration flow cytometer, you should never have to sacrifice dependability and performance just to stay on budget.

Continuous Availability

Uptime is an important consideration in purchasing a cytometer and Stratedigm takes this very seriously—designing and manufacturing quality and reliability in the U.S.A. from the get-go. Start with the optical bench—this patented single plate “unibody” construction is the underpinning of a rugged design that performs to-spec even if moved or jostled. The unique EPP enclosure eliminates vibrational and temperature-related instability—and as an added bonus, reduces weight and part count. Automated software routines for startup, shutdown, and other tasks keep the instrument at the ready. Continuous software monitoring of key variables alerts you when attention is needed...before it becomes a problem. Our Remote Diagnostics Agent can relay real-time service information and critical performance stats to our service center—improving service levels and uptime, and decreasing costs. The SE520EXi is ready when you are.

Brilliant In More Ways Than One

To see or not to see...that is the difference between high-end systems and many of the “low-cost” systems on the market today. In order to take the cost out of the product, many manufacturers will compromise by using inferior components or eliminating functionality that ensure 20/20 vision: resulting in a cytometer that cannot “read the fine print” in your sample. For routine applications with high antigen density, this may be fine. But in uncharted territory, how do you know what you are missing? Stratedigm has optimized the optical, fluidic, and electronic elements to maximize the amount of light generated and collected from the sample, while minimizing the amount of background light that clouds the picture. The proof is in the data. The best part is we do all of this without breaking your budget.

Laser

- System is designed to support two lasers with spatial separation
- Lasers:
 - Solid-state 488 nm - 150 mW
 - Solid-state 640 nm - 100 mW

Detector Parameters/Data Acquisition

- Forward scatter (FSC) – enables separation of unfixed platelets from noise
 - FSC resolution: < 500 nm polystyrene beads
 - FSC scales: log and linear
 - FSC parameters: width, peak height, area
- Side scatter (SSC) – resolves lympho-, mono- and granulocytes
 - SSC resolution: < 200 nm polystyrene beads
 - SSC scales: log and linear
 - SSC parameters: width, peak height, area
- Fluorescence channels:
 - Standard number of colors: 6
 - Sensitivity: < 100 MESF
 - Fluorescence resolution: < 2.5% CV
 - PMT scales: log and linear
 - PMT parameters: width, peak height, area
 - Time: 13 μ sec resolution

Analysis Rate and Carryover

- Analysis rate: 10,000 events/sec
- Carryover: < 0.1%, with automatic backflush between samples

Sample Input

- Dead volume: < 8 μ L
- Minimum sample volume: < 20 μ L
- Maximum particle size: up to 40 μ m polystyrene beads and up to 130 μ m cells
- Patented low insertion force single tube loading

Fluidics Tray

- Integrated fluidics tray does not increase the footprint of the instrument
- Automated startup, shutdown, and cleaning cycles
- Automated decontamination procedure using on-board cleaning solution for all components in contact with sample
- Tank capacity: 4 L sheath, 4 L waste, 4 L auxiliary solution
- Optional automated sheath tank fill and waste drainage

Operating Conditions

- Operating conditions: 60–86 °F (15–30 °C)
- Size (including fluidics tray): 21.5" W x 21" D x 24" H (54.6 cm W x 53.3 cm D x 61 cm H)
- Weight (including fluidics tray): < 70 lbs (35 kg)
- Power: 110/115/230 VAC, 50–60 Hz

**488 nm - Blue
(150 mW)**

FITC (530/30)
PE (580/30)
PerCP/PE-Cy5 (676/29)
PE-Cy7 (780/60)

**640 nm - Red
(100 mW)**

APC (676/29)
APC-Cy7 (780/60)



A600 HTAS

High Throughput Auto Sampler

Flat-6 Injection, Absolute Counting

Liquid Handling



We've had our [Stratedigm S1000 cytometer and A600 HTAS] since 2016. The A600 has proven itself to be a workhorse and we've run over 50K acquisitions on the plate system with minimal downtime and outstanding results.

*Dr. Orit Sagi-Assif
Tel Aviv University*



Brilliant In More Ways Than One

The A600 HTAS' (High Throughput Auto Sampler) design is as unique and revolutionary as Stratedigm's flow cytometers. A single, fully ceramic syringe pump with an integrated valve assembly allows for reliability, dynamic range, absolute cell counting, and precision far exceeding other conventional plate loaders. The A600's fluidics architecture keeps samples away from all valves and pumps, virtually eliminating carryover and dead volume. A proprietary overinject feature allows the A600 HTAS to deliver the entirety of the aspirated sample to the flow cytometer. This enables the complete analysis of rare samples, while the optional solid-state temperature control module protects the sample during long acquisitions.

Speed You Require

The A600 HTAS is designed for speed. Stratedigm's Flat-6 Technology™ enables aspiration and injection through six independent probes working in concert, delivering unparalleled speed and precision. This is achieved through faster aspiration, decreased wash time, and reduction of redundant robot motion required to process a full microtiter plate.

Ease of Use You Expect

The A600 HTAS is seamlessly integrated with Stratedigm's CellCapTure™ software, allowing for intuitive experiment design and the ability to use a variety of tubes and plates. CellCapTure™ allows experiments to be designed for temperature and/or time-based incubation studies. The presence of preset modes in the CellCapTure™ software enables new and experienced users alike to design optimal experiments with minimal training. Users can also use drag-and-drop programming via our patented Visual Protocol Designer (VPD) and leverage easy template creation to build Multi-Plate Experiments. Whether users create simple, one plate experiments or perform complex, multi-plate protocols, CellCapTure™ makes using the A600 HTAS effortless.

Product Introductions

Stratedigm's A600 High Throughput Auto Sampler (HTAS) is more than just a high-speed plate loader. With an all-ceramic high precision pump and six injection probes working in unison, it delivers speed, functionality, and reliability beyond any other conventional plate loaders on the market. The A600 HTAS comes standard with sample prep and reagent mixing capabilities, optional and programmable solid-state sample temperature control, sample incubation, aspiration, and offers injection volumes ranging from 5-400 μ L.

Its proprietary design ensures that your entire sample is delivered to the analyzer with true zero dead volume capability. An integrated barcode scanner can also be added to keep track of your microtiter plates. The A600 HTAS can house 12 Eppendorf tubes or 24 cluster tubes in addition to a variety of different microtiter plate models for reagent/sample mixing and preparation. The A600 HTAS integrates seamlessly with any S1000 and SE520 series analyzer and offers advanced user-defined programming via Stratedigm's patented Visual Protocol Designer (VPD) in CellCapTure™ software.

Performance:

- Throughput: 96 wells < 15 min using Rapid Screening Mode.
- Dead volume: zero dead volume design ensures no sample is wasted in internal fluid path
- Carryover: < 0.5% based on control beads
- Reagent mixing: up to 24 different reagents can be added to a microtiter plate
- Sample volume: user-adjustable via CellCapTure™ software from 5–400 μ L
- Wash volume: user adjustable via CellCapTure™ software
- Absolute volumetric counting: < \pm 10% error

Plate Compatibility:

- 24-well: flat and round bottom
- 96-well: U-bottom, V-bottom, flat bottom, and deep well
- 384-well: flat bottom
- Tubes: 12 or 36 Eppendorf tube adapter, 96 cluster tubes

System Compatibility:

- Software: Stratedigm CellCapTure™ software
- Flow cytometer: any S1000 or SE520 series analyzer

Options and upgrades:

- Temperature control: user adjustable via CellCapTure™ software from 8–40 °C using solid-state technology
- Incubation: user adjustable via CellCapTure™ software
- Barcode scanner type: integrated
- Sample aspiration and mixing: programmable suck and spit via injection probes

Other Specifications:

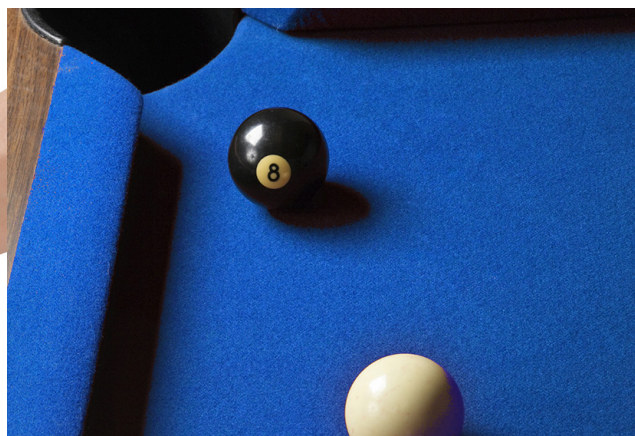
- Size: < 11" W x 15" D x 13" H depending on upgrade options
- Weight: < 40 lbs depending on upgrade options
- Noise level: < 65 dBA
- Operating power: 100–240 VAC
- Operating temperatures: 60–86 °F (15–30 °C)



A710 HTH

High Throughput Hotel

Load-and-Go Automation Suite™



Automation You Will Love

The all-new A710 High Throughput Hotel (HTH) has been completely redesigned from the ground up. It now has a revolutionary new kinematic auto-alignment system to ensure perfect plate placement every time. And with our proprietary new alignment system, there is no need for ultra-flat surfaces—making automation even more accessible to any lab. Completely reimagine automation-based experiments with drag-and-drop programming via our patented Visual Protocol Designer (VPD) and leverage templates to build multi-plate experiments. And to make things even better, the A710 HTH now comes standard with a two-year warranty.

Ease of Use You Expect

The A710 HTH works in perfect synchronization with your A600 HTAS and the CellCapTure™ software suite. The straightforward template-driven experiment design and automated fluidic modes provide users with a simple “load-and-go” workflow. Barcode your plates and the integrated advanced imaging system automatically matches your plate template ensuring data integrity.

Flexibility You Demand

Automated software controls provide users the ability to run lidded or unlidded experiments with the same variety of plate types compatible with the A600 HTAS. The A710 now has a higher-per-hotel plate capacity than its A700 predecessor; additionally, it has user-adjustable random access racks to easily accommodate deep-well format plates on the fly. Users can also effortlessly manage multiple experiments requiring different sets of reagents with our all-new A710 compatible reagent rack! And even if you're not an existing Stratadigm flow cytometry customer, our A710 is now available for OEM!

Features:

- Kinematic auto-alignment for perfect plate placement
- Simple one-touch setup
- Works on most lab surfaces
- Advanced imaging – automatic plate detection and barcode scanning (optional)
- Standard two-year factory warranty

Storage Options:

- Accommodates up to 8 random access or sequential racks
- High-Density random access rack (RAR) – up to 12 plate capacity per rack for standard depth plates and up to 6 plate capacity for deep-well plates per rack
- Sequential access rack (SAR) – 30 plates per rack

Plate Compatibility:

- Lidded or unlidded experiments
- 24-well: flat and round bottom
- 96-well: U-bottom, V-bottom, flat bottom, and deep-well
- 384-well: flat bottom
- Tubes: 12 or 36 Eppendorf tube adapter, 24 or 96 cluster tubes

Optional Accessories:

- Barcode scanner – automatically match plates to plate templates
- Multi-reagent rack (MRR) – up to six 12- or 24-well Stratedigm reagent racks

System Compatibility:

- Software: Stratedigm CellCapTure™ software
- Flow cytometer: any S1000 or SE520 series analyzer – requires the use of a Stratedigm A600 HTAS for integration
- Now available for OEM with Stratedigm's MotionCapTure software

Other Specifications:

- Power requirements: 110–230 V
- Operating environment: 60–86 °F (15–30 °C)
- Weight: 30 lbs
- Size: 22" D x 32" H



A800 CI

Cell Incubator

**44 Plate Capacity, Orbital Shaking,
Full Environment Control**



...adding an A800 [Cell Incubator] to our workflow makes working with many automated assays requiring incubation super simple. Combined with their Visual Protocol Designer software, the full automation system has allowed for fast and easy sample preparation and analysis.

*Shawn Ramsaroop
Senior Research Scientist
Aperture Bio*



Reliable and Fast

Your samples are valuable and a well-maintained incubation environment is what keeps them safe. The A800 Cell Incubator (CI) has a range of ultra-stable environments to ensure your samples are stored in the most optimal conditions no matter the duration. The A800 allows for precise temperature control, active humidity control, and stable CO₂ gassing. With the programmable true orbital shaking option, your samples will be perfectly aerated and mixed. The fast plate retrieval time makes the A800 CI perfect for all high throughput assays and workflows, giving you results when you need them.

Small and Feature-Rich

The A800 Cell Incubator (CI) comes in a small footprint that can be customized to user needs while maximizing lab space. Its 44 microtiter plate capacity makes it ideal for small-scale integration, highly miniaturized applications, timed incubation assays, as well as laboratories with room constraints. With options for temperature range, CO₂ gassing, active humidity control, true orbital shaking, and multiple cleaning modes, the A800 will exceed all your application needs. Since the A800 CI floor and benchtop models are stackable, users can effectively double their environmental storage capacity and/or create multiple distinct environments.

Simple and Intuitive

CellCapTure™ has a simple and intuitive interface that allows users to easily program and integrate their A800 Cell Incubators (CI) into their workflows. Users can use drag-and-drop programming via our patented Visual Protocol Designer (VPD) and leverage easy template creation to build Multi-Plate Experiments. Whether creating simple one plate experiments or performing complex, multi-plate protocol, CellCapTure™ makes using the A800 CI effortless.

Product Introductions

The A800 Cell Incubator Short Range (CI-SR) and A800 Cell Incubator Wide Range (CI-WR).

- Flexible configuration:
 - Benchtop option
 - Floor option
- Active humidity control
- Compact footprint
- Up to 44 plate capacity
- Optional upgrades:
 - True orbital shaking
 - Fast CO₂ gassing
 - Preventative automated daily decon
 - Full system decon

A800 CI-WR (Wide Range)

Temperature Range and Humidity:

- 4–50 °C ± 0.3 °C
- 90–95%

Size, Weight, Power:

- Dimensions: 85 cm x 74 cm x 147 cm (package)
- 485 mm W x 514 mm D x 1203 mm H (+20–35 mm for feet); Transfer height: 1000 mm
- Net weight: 125 kg; Tare: 57 kg; Gross weight: 182 kg
- Power: 500 W Power Consumption; 100 V / 50 Hz; 115 V / 60 Hz; 230 V / 50 Hz; Switchable

A800 CI-SR (Short Range)

Temperature Range and Humidity:

- 33–50 °C ± 0.2 °C
- Max 95% humidity

Size, Weight, Power:

- Dimensions: 85 cm x 74 cm x 147 cm (package)
- Net weight: 88 kg
- Tare: 57 kg;
- Gross weight: 145 kg
- Power: 450 W Power Consumption; 100 V/50 Hz; 115 V/60 Hz; 230 V/50 Hz; Switchable

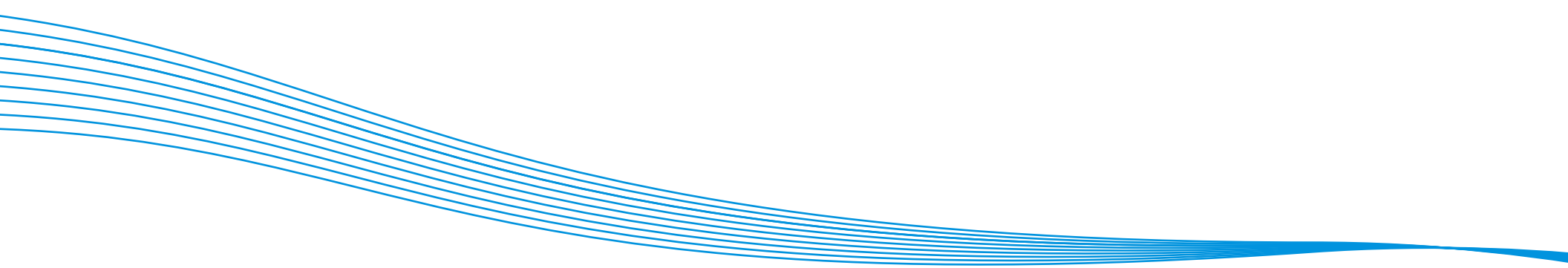


A8



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



For Research Use Only. Not for use in diagnostic or therapeutic procedures.

Stratedigm follows a policy of continuous product improvement. Specifications are subject to change without notice.

U.S. Patent No. 10338897B2, U.S. Patent No. 7821631B1, U.S. Patent No. 8202059B1,
U.S. Patent No. 8202733B1, U.S. Patent No. 8570500B2, U.S. Patent No. 9108196B1,
U.S. Patent No. 9857284B1, U.S. Patent No. 9952136B2, U.S. Patent No. 10571386B2

Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Stratedigm, Inc. is strictly prohibited. Product availability and prices are subject to change without notice.

Stratedigm, Stratedigm Logo, and all other trademarks are property of Stratedigm, Inc.

(408) 512-3901

info@stratedigm.com

www.stratedigm.com

v9.2.7