

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)

