



THE GREEN TEAM

SQII ELISA PROCESSOR AND
AESKULISA® ELISA TEST KITS

SQII FULLY AUTOMATED WALK-AWAY ELISA PROCESSING SYSTEM – MAKING AESKULISA AUTOMATION EVEN EASIER

SQII - the ELISA processor by AESKU.SYSTEMS, designed for labs with medium- to lower-throughput needs

SQII - featuring innovative electro-mechanics and software design

SQII - a reliable, cost-effective, easy to use and low-maintenance system

SQII - packing great automation power in the smallest footprint available in the market

SQII - improving your testing capacities while delivering reliable and consistent results

SQII - delivering the performance you demand and the value you expect

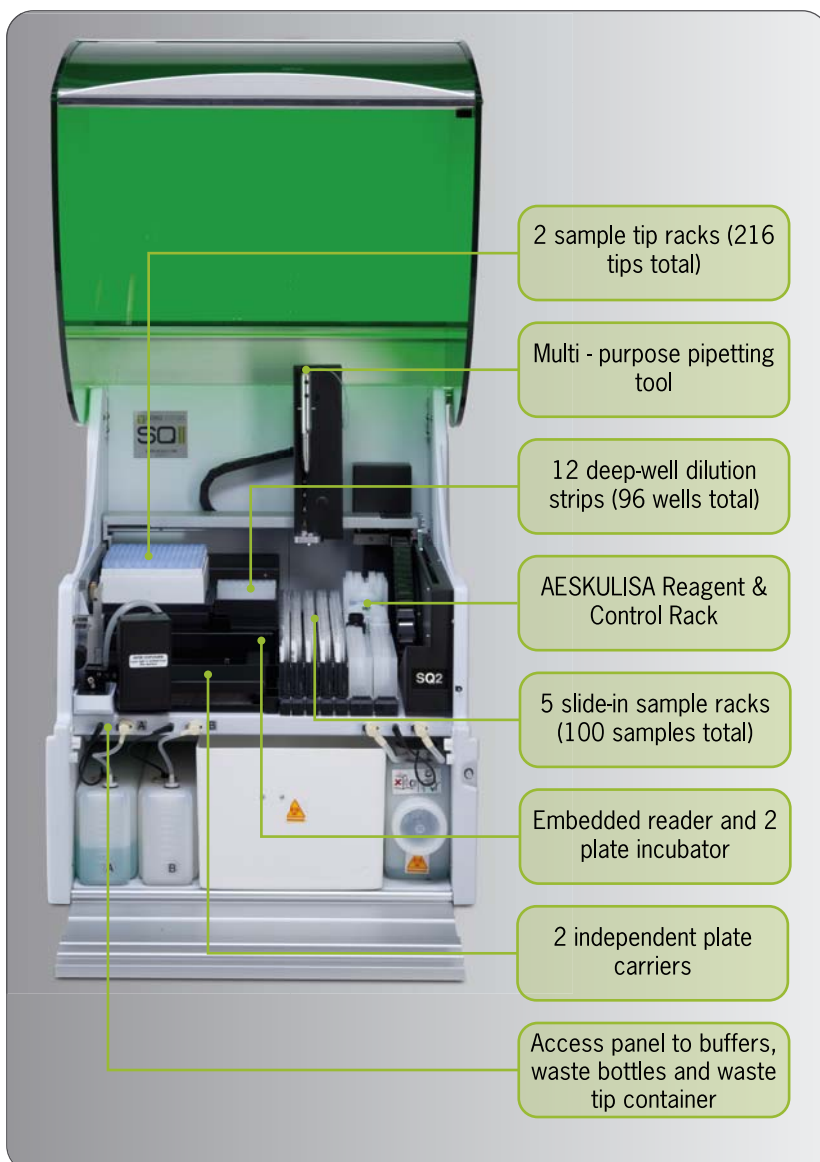
With its full walk-away capability, SQII quickly and easily processes two 96-well microtiterplates and up to 4 different assays simultaneously (Aeskulisa Rack), featuring the most user friendly control system available, sample ID and reagent bar-code reading, assay process and instrument self-diagnostics.

SQII DELIVERS SAMPLES-IN / RESULTS-OUT AUTOMATION OF MICROTITERPLATE ASSAYS



INGENIOUS HARDWARE MEETS INTELLIGENT SOFTWARE DESIGN

SQII was designed for efficiency and reliability. The system has only few moving parts, one multi-functional robot arm does everything: from pipetting to operating the bar-code reader. In addition, the SQII vertical design multi-plate carrier saves space, enabling a minimal footprint with maximum consumable storage:



- 100 bar-coded sample positions
- 216 Sample Tips
- 20 Reagent Tips
- 96 Dilution Vessels in convenient 8-way strips
- 32 calibrator and control positions
- 1 large sample diluent bottle & 6 medium reagent bottles (Aeskulisa Rack)
- 32 Standard control vials (Aeskulisa Rack)

Versatile and truly innovative in its process simulation and ease of use, the SQII software allows the integration of automation in your lab with confidence. The simple, graphical interface enables every lab technician to use SQII with minimal training. The assay creator, with drag-and-drop icons, walks you through the entire programming process, prompting you step by step, making set-up of your assays a breeze. Did you miss a critical process step? SQII will let you know before you can move on.

No more wasting precious reagents or consumables with multiple test runs to validate your assays. Activate the process simulator, and the system shows a full animation of the assay steps outlined. If you want to adjust the assay parameters, you can visualize exactly how it will work before you implement the change. Once you start your assay run, the process timeline and simulator exactly show you where you are and how much time is left. The Electronic Signature Pipetting (ESP) software provides in-process verification of critical fluid and sample transfer.

Worry-free system assures accurate results

SQII prompts you if action is required, for example, you need to add more reagents or wash fluids – just set up the SQII to deliver an audible alarm and/or send you an e-mail outlining the problem. Integrated self-diagnostics make troubleshooting easy. You can even send AESKU.SYSTEMS technical support a problem description from within the application, with the system information automatically attached.

SQII is pre-programmed and validated to run all AESKULISA test kits developed and manufactured by AESKU.DIAGNOSTICS. Equipped with the AESKULISA custom-made rack, you no longer have to transfer standards and reagents into new and unlabelled vials. By combining the SQII ELISA processor with AESKULISA test kits you can maximize your automation efficiency while saving hands-on time and costs in unnecessary needed consumables. As an open system, SQII is capable of processing virtually any ELISA application – from clinical diagnostics, such as autoimmune and infectious disease, to food safety and drugs-of-abuse testing.

AESKULISA TEST KITS & SQ2 FULLY AUTOMATED ELISA PROCESSOR: REAL TEAMPLAYER

125 different AESKULISA test kits for simplified manual and automated use.



Custom-made SQII rack to directly fit all AESKULISA standard and reagent kit vials



SQII fully automated ELISA processor will do the rest



Optimize your lab routine with the SQII ELISA Processing System and benefit from the widest range of standardized AESKULISA tests available for all major autoimmune diseases, infectious diseases and hemostasis.

All AESKULISA kits have been designed to consistently use the same test procedure and common reagents to make the complex autoimmune testing routine – manual and automated an easier task.



Wash Buffer (AESKULISA Common reagent)

THE AESKULISA RACK FOR SQII - A UNIQUE TOOL FOR A PERFECT COMBINATION

- Processing up to 4 different assays in one run
- Using the AESKULISA common reagents (Wash & Sample Buffer, TMB, Stop Solution)
- Use up to 32 calibrators or quality controls
- All vials directly fit in the AESKULISA Rack

Sample Buffer (AESKULISA Common reagent)

4 different Conjugates

TMB (AESKULISA Common reagent)

Calibrators for quantitative or qualitative results

Barcoded reagent rack for traceability of Elisa tests

Stop Solution (AESKULISA Common reagent)

secure fit of all AESKULISA vials directly in the rack

Quality Controls



TECHNICAL SPECIFICATIONS & ORDERING REFERENCE

Physical specifications

Dimensions:	H x W x D 66 x 54 x 68 cm
Weight (net):	48 kg
Shipping weight:	100 kg
Power supply	
Voltage:	100 – 240 V auto-switching
Frequency:	50/60 Hz
Power consumption:	<300 VA

General specifications

Number of plates:	2
Sample capacity:	100 per load
Continuous load:	Yes
Sample-tube size:	10 – 16 mm diameter 40 – 100 mm height
Reagent fluid capacity:	1 x Sample Diluent Bottle, 110 ml (SQII/AESKULISA Rack) 6 x Conjugate, Substrate, Stop Solution vials (SQII/AESKULISA Rack)
Control and Standard fluid capacity:	32 x 1,5 mL vials (SQII/AESKULISA Rack)
Dilution capacity:	(96) 12 x 8 deep-well strips
Sample-tip capacity:	216 tips
Reagent-tip capacity:	20 tips
Assays per run:	Up to 4 (Aeskulisa Rack)
Selftest at startup:	Yes

Reader specifications

Dynamic range:	0 – 3.0 OD
Spectral range:	405 – 690 nm
Filter slots:	6
Reading channels:	12 plus reference channel
Reading modes:	Single, dual
Read time:	<30 sec (single wavelength) <50 sec (dual wavelength)
Precision:	<1% CV (<2.0 OD) <1.5% CV (2.0 – 3.0 OD)
Accuracy:	+/- 0.005 OD or 2.5% (whichever is greater)

Washer specifications

Manifold configuration:	8-way
Dispense-volume range:	50 – 1000 µL
Wash cycles:	1 – 9 (repeatable)
Residual volume:	<3 µL
Super aspirate mode:	Yes
Wash-buffer capacity:	2 x 2 L
Low-buffer alarm:	Yes
Soak time:	0 – 999 seconds
Dispense pressure:	Pre-set
Rinse function:	Input connector for users' external bottle, any size
Waste-water container:	1 x 1.5 L

Incubator specifications

Temperature range:	Ambient + 4° C to 40° C
Temperature uniformity:	+/- 1° C across plate @ 37° C
Shaking:	Independent linear motion 14-20 Hz (periodic or continuous)
Incubation time:	Programmable
Time to set temperature:	<1 min
Temperature monitoring:	Yes

Pipetting specifications*

Type:	Disposable tips (2 types)
Sample-tip range:	Tip type 300 µL (10 – 250 µL dispense range)
Reagent-tip range:	Tip type 1,300 µL (20 – 1,000 µL dispense range)
Maximum dilution:	1 to 5,000
Serial dilutions:	Yes
Replicates:	Up to 96 samples, standards, and controls
Precision, sample tip:	<3% CV (10 – 200 µL)
Precision, reagent tip:	<3% CV (20 – 1,000 µL)

Process security

Liquid-level sensing:	Yes (reagents, controls, and samples)
Level-sensor system:	Pressure differential
Clot detection:	Yes
Foam detection:	Yes
Dispense-anomaly detection:	Yes
Tip detection:	Yes
Well-fill verification:	Yes
Alarms:	Yes

Software

Computer (not included):	Current model desktop or laptop PC running MS Windows® XP or higher (Contact AESKU.SYSTEMS for current specs prior to purchase)
Controlling software:	DS-Matrix™
Work protocols (assays):	Unlimited
Data processing:	Quantitative and qualitative
Levey-Jennings:	Yes
Westgard rules:	Yes
Process reporting:	Event log + error log
Automatic error recovery:	Yes
Password access control:	Yes

Specifications subject to change without notice
*Factory calibration and verification of the pipette module are carried out
using a calibration fluid.
It is the user's responsibility to perform the validation studies necessary to
assure proper assay performance.

SQII Product list and ordering references

Description

System	REF.	Description
	REF. SQ2-1000	SQII AUTOMATED ELISA PROCESSING SYSTEM (incl. standard items)
Accessories	REF. SQ2-3001	Dilution Strips (250x8-well)
	REF. SQ2-3002	Sample Tips Racked (4x108)
	REF. SQ2-3003	Reagent Tips Racked (4x108)
	REF. SQ2-3004	Reagent Bottles 20 ml (24 pack) for use with SQII/AESKULISA rack
	REF. SQ2-3005	Standard/Control Vials 1.5 ml (48 pack) for use with SQII/AESKULISA rack
	REF. SQ2-3006	Sample Diluent Bottles, 110 ml - 24/pack for use with SQII/AESKULISA rack