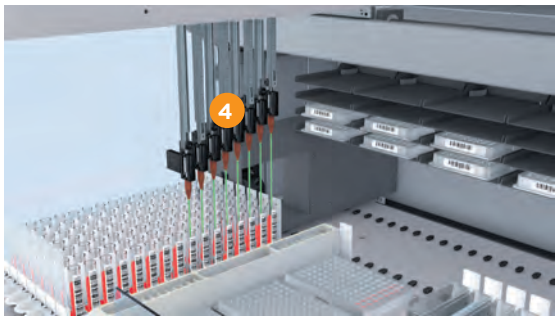
Freedom EVOlyzer®

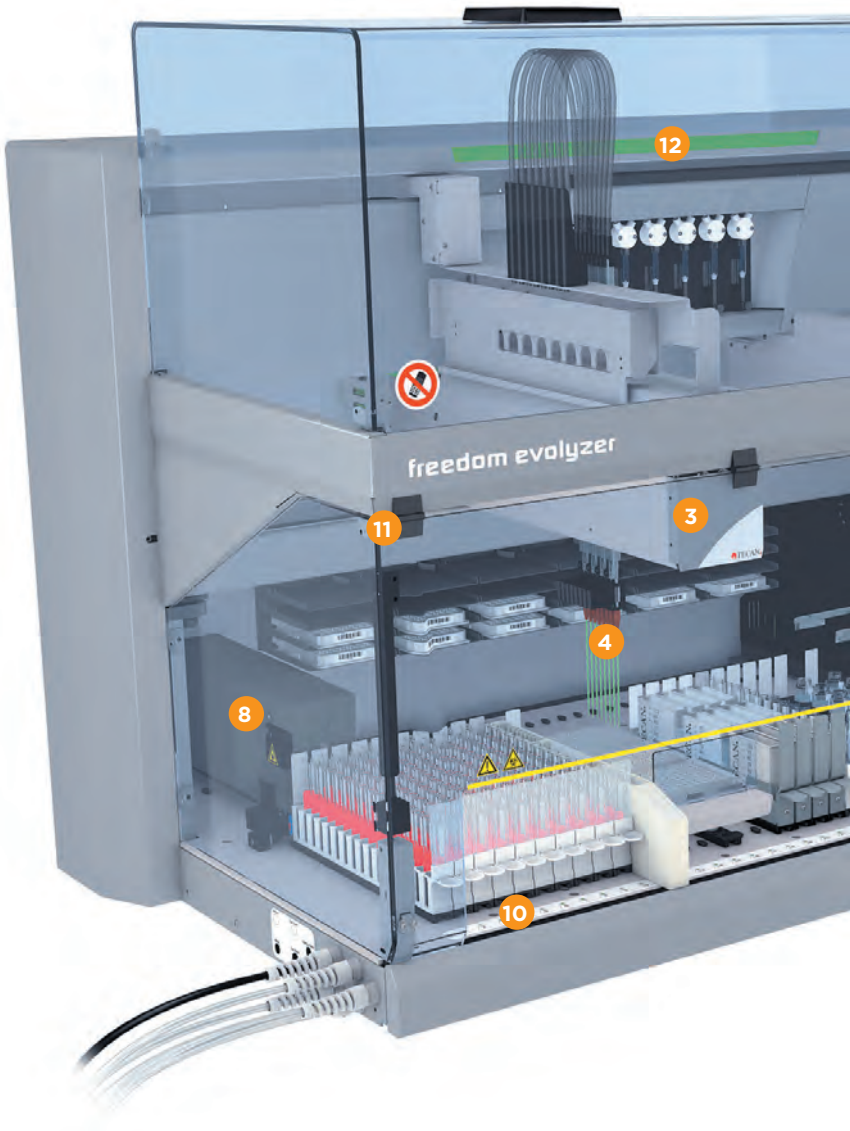
FULLY AUTOMATED ELISA PROCESSING

Powerful ELISA processing.

The Freedom EVOlyzer enables full automation of microplate-based ELISA analysis. It is adaptable for varying throughputs while maintaining the speed, precision and accuracy needed to operate in a clinical environment.
The platform is easily integrated with LIMS solutions, via ASTM communication, and is well suited for dynamic environments, thanks to its continuous loading functionality.



PTFE-coated stainless-steel tips provide high precision pipetting



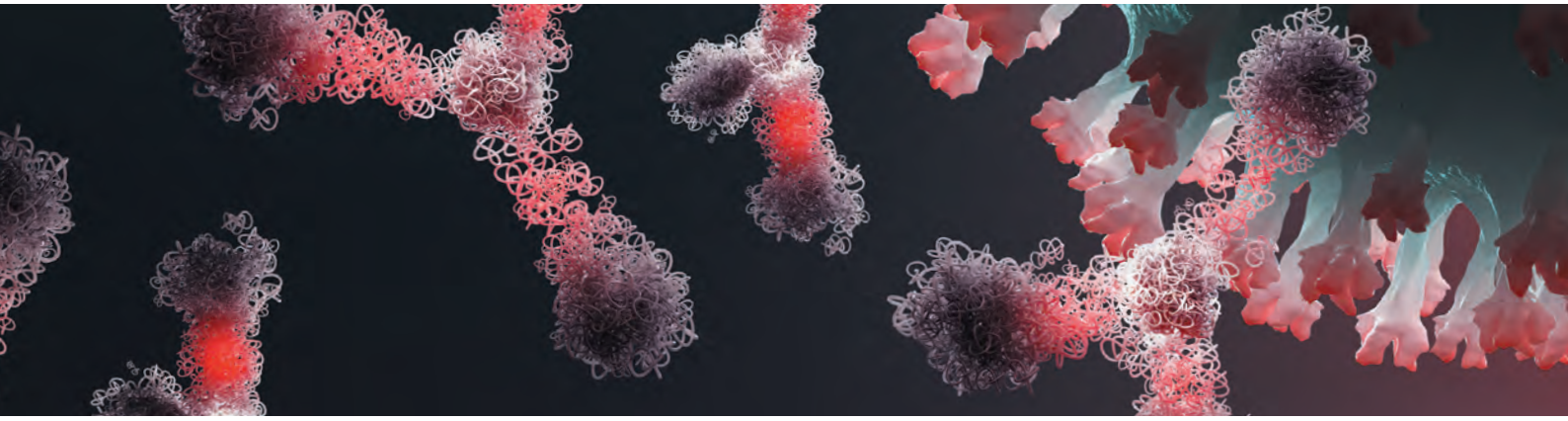
ECONOMICAL

The Freedom EVOlyzer offers a **one-stop automation solution** for laboratories performing ELISA. Its open platform architecture enables automation of both **Tecan ELISAs** and assays from other manufacturers.

The system uses established Tecan modules – such as the 1 **Sunrise™** reader and 2 **HydroFlex™** washer – to reduce the time needed for validation. The uniformity with the Freedom EVO family reduces complexity, simplifies maintenance, and enables ease of use.

The 3 **Liquid Handling Arm** can be fitted with either washable 4 **stainless-steel tips,** disposable tips, or a combination of both.

The 5 **Robotic Manipulator Arm** provides swift transfer of plates between the pipetting area and other modules for washing, incubation or detection.

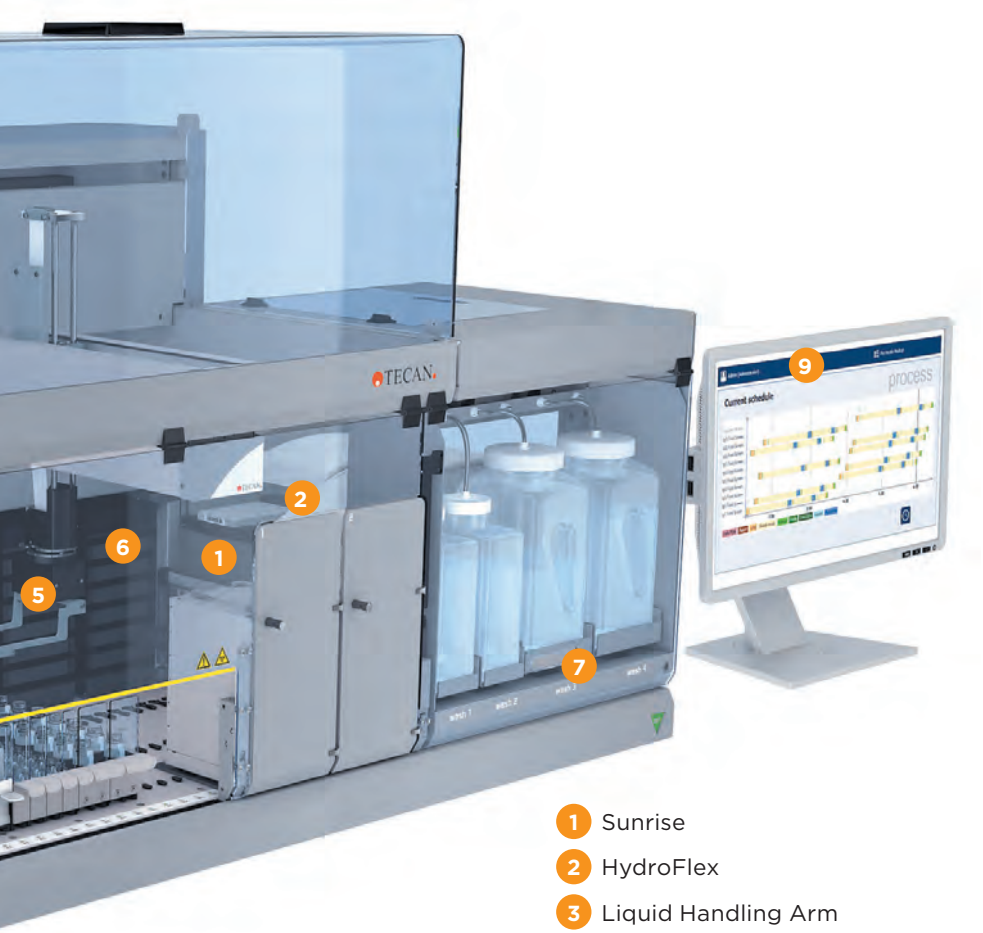


PRECISE

The Freedom EVOlyzer uses **capacitive liquid level detection (cLLD)** for all pipetting events enabling prechecking of reagent volumes and **clot detection** for sample aspiration, providing enhanced safety and precision for liquid handling.

Heated and/or shaking incubations are performed by integrated 6 **Monitored Incubator Option (MIO™),** which individually controls and monitors the temperature for each **incubator** slot.

7 **Sensor systems** also monitor the liquid levels of bulk reagents – i.e. wash buffers, system liquid and waste containers – as part of the integrated **process control.**

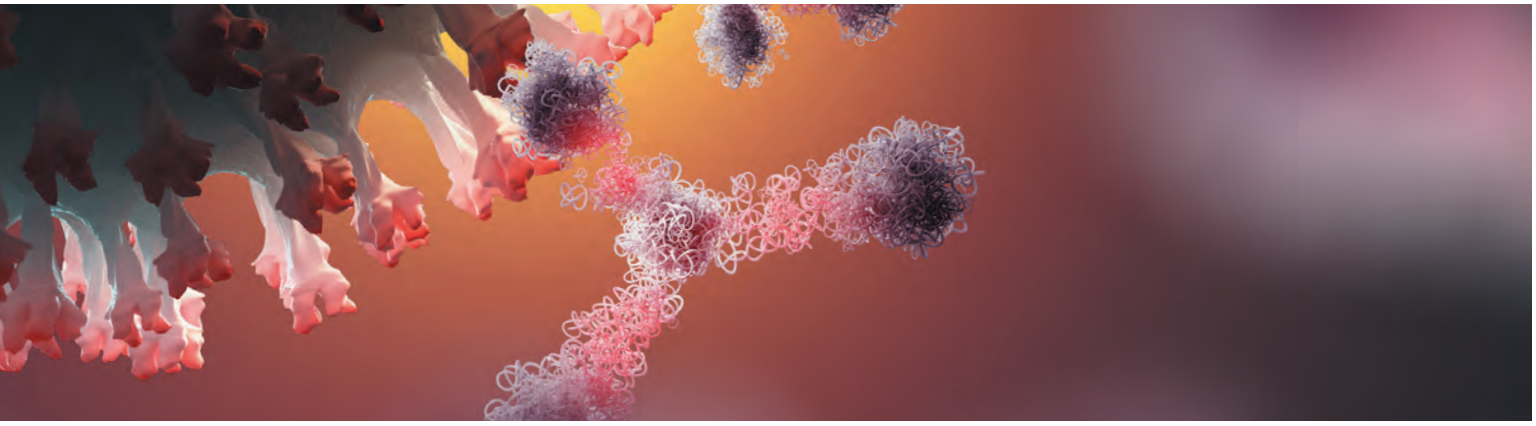


COMPLIANT

Freedom EVOlution™ software enables straightforward integration with **LIMS systems** via the built-in, bi-directional **ASTM communication.**

Freedom EVOlution assay configurations can be frozen and **electronically signed** to prevent unauthorized changes. The user management supports three levels of user administration.

1. Sunrise
2. HydroFlex
3. Liquid Handling Arm
4. Stainless-steel tips
5. Robotic Manipulator Arm
6. Monitored Incubation Option
7. Sensor systems
8. PosID3 1D barcode scanner
9. Touch Screen with EVOlution software
10. Active Worktable
11. Safety panels
12. Instrument run status indicator
13. Loading port



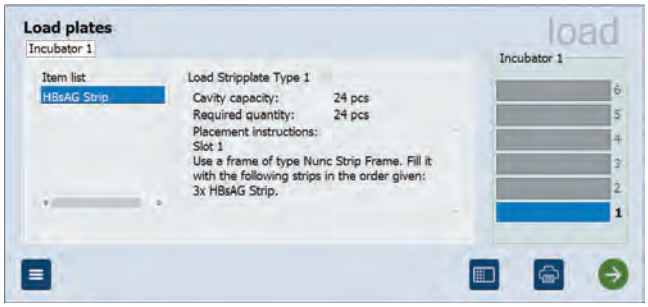
RELIABLE

The Freedom EVOlyzer uses the sophisticated **Magellan™** data reduction software for all endpoint assay analyses. This provides powerful capabilities, exceptional data presentation and outstanding graphical flexibility.

Process reliability is enhanced using standard Freedom EVO features, such as the integrated barcode reader 8 **PosID3™,** enabling full **sample and reagent traceability.**

9 USER FRIENDLY SOFTWARE – FREEDOM EVOLUTION

Dynamic scheduling allows processing of multiple assays with Freedom EVOlution software.



Step-by-step guided loading is provided by Freedom EVOlution when assays are started.

Periodic maintenance methods are integrated into Freedom EVOlution, and their execution is logged.

Continuous loading fuctionality allows addition of new samples during active run.

DISCOVER THE FREEDOM EVOLYZER

To learn more about the Freedom EVOlyzer, contact your nearest Tecan office or visit: **lifesciences.tecan.com/freedom-evolyzer**

To learn more about Tecan immunoassays and pre-programmed EVOlution protocols, visit: **www.ibl-international.com/en/automation/cat-evolyzer**

SCAN ME

TO LEARN MORE ABOUT THE FREEDOM EVOLYZER

Let it guide you trough your process.

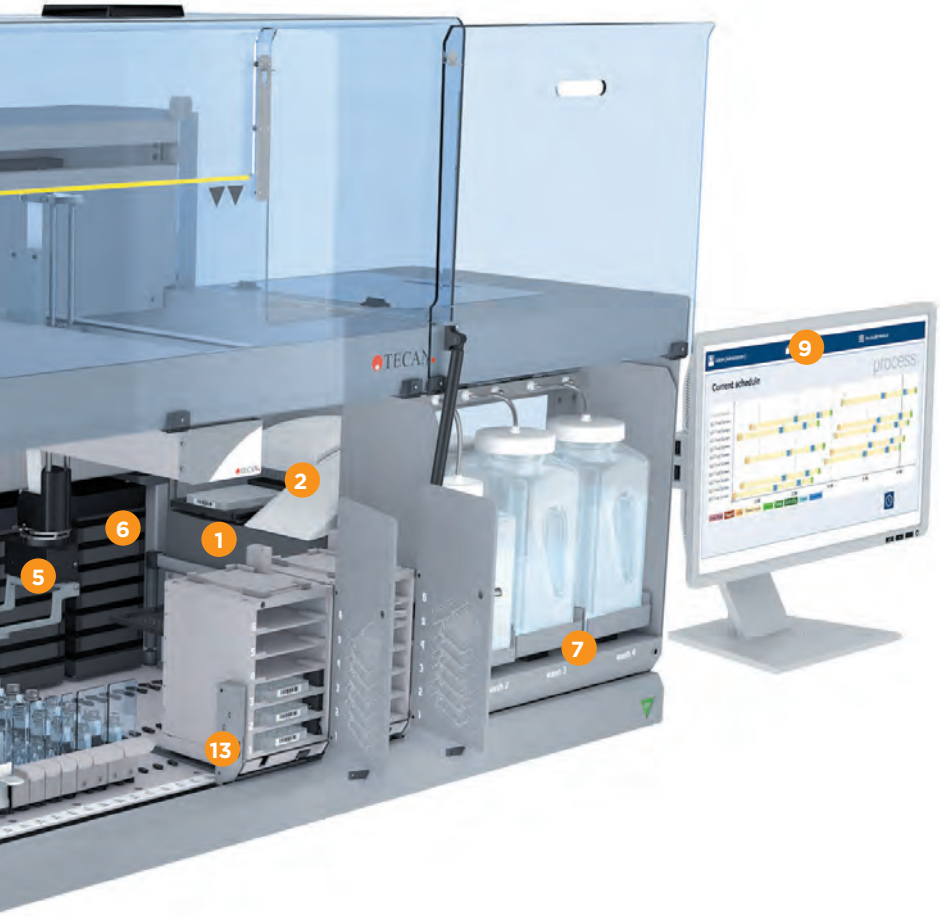
SIMPLE

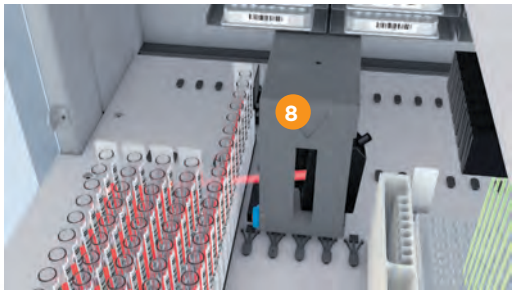
Freedom EVOlution software offers laboratory operators simple and straightforward control of their instruments. The clear 9 **step-by-step interface,** guides users through the running of ELISA protocols as well as the **integrated maintenance methods.**

How to load samples, reagents and plates is clearly directed by the software. The Freedom EVOlyzer's 10 **active worktable** indicates what action is needed, and where, with **color-coded LED lights.**

The Freedom EVOlyzer offers **long walk-away times** without the need for user intervention once an ELISA process has started, with **process control** and logging of all events handled by Freedom EVOlution.

Additionally, Freedom EVOlution informs operators when and which of the integrated maintenance methods are due to be performed, and records easily accessible via the monthly **maintenance logs.**





PosID3 barcode reader for full traceability

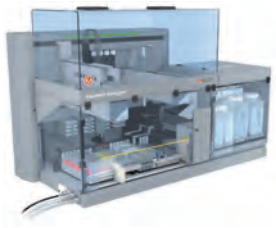
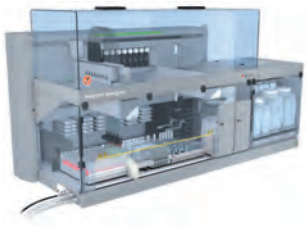
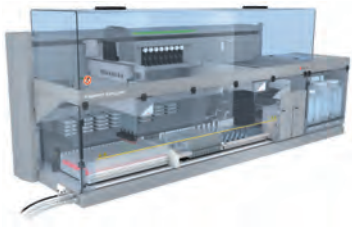
SAFE

All ELISA processes are monitored by the **integrated process control.** The 8 **integrated barcode reader** scans all samples and consumables after loading for complete **sample and reagent traceability.**

User interventions are prompted by Freedom EVOlution. 11 **Safety panels** and loading hatches are unlocked when required to allow access to the worktable.

Operators are also alerted through acoustic signals and 12 **flashing lights** when manual interactions are required. **Color-coded LED lights** on the 10 **active worktable** indicate where intervention is needed.

CONFIGURABLE

General	Freedom EVOlyzer 100	Freedom EVOlyzer 150	Freedom EVOlyzer 200
Worktable size	Max. 25 grids (rack positions)	Max. 40 grids (rack positions)	Max. 58 grids (rack positions)
Tip configuration	2 or 4 tips	4 or 8 tips	8 tips
Tip types	Fixed and disposable tips, with or without filter (200/1,000 µl) Various combinations of fixed and disposable tips can be used		
Ambient incubator slots	6 positions	6 or 12 positions	12 positions
Heated incubator slots	6 positions	6 or 12 positions	12 positions
Sample input formats	10 to 16 mm diameter sample tubes, microplates, strip plates or deep-well plates		
Dimensions H/W/D (mm)	910/1,520/800	910/1,890/800	910/2,490/800

Liquid handling	
Pipetting precision achievable	10 µl with ≤ 3.5 % (fixed tip, disposable tip 200µl) 100 µl with ≤ 0.75 % (fixed tip, disposable tip 200µl)
Liquid detection	Down to 50 µl of conductive liquid can be detected
Predilution options	Common, serial or exclusive predilution, as well as combined predilutions on one plate
Barcode identification	Sample tubes, microplates, deep-well plates, strip plates, reagent containers
Supported formats	Code 39, Code 128, Codabar and 2 of 5 interleaved
Barcode evaluation	Sample identification, reagent identification, lot number control, lot expiry date control

Incubator: MIO™	
Temperature range	37 or 46°C, with accuracy of +/- 1°C
Shaker	Optional, up to 500 rpm

Washer: HydroFlex™	
Manifold	8-way or 16-way
Wash channels	4 channels for wash buffers, with wash buffer capacities: 2 x 2 liters and 2 x 4 liters, with liquid level sensors

Photometer: Sunrise™	
Measurement range	340-399 nm, 0-3.0 OD; 400-750 nm, 0-4.0 OD
Wavelength selection	4 or 6 fixed interference filters (405, 450, 492, 540, 570, 620 nm) or gradient filter (400-700 nm)

Software: Freedom EVOlution™	
Operating System	Microsoft Windows® 10 Entreprise LTSC, 64-bit
LIMS Interface	Bi-directional ASTM (NCCLS LIS1, NCCLS LIS) interface

This product may not be supported in your local territory. Please contact your local sales representative.

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