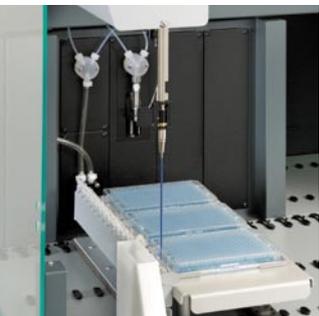


Freedom EVO[®] 75

State of the art compact pipetting robot

One platform: unlimited options, individual solutions



The Freedom EVO 75 is a compact liquid handling system for low to medium throughput applications. The smallest of a family of four, it shares with the larger Freedom EVO workstations the same high modularity, excellent liquid handling performance and reliability that you have come to expect from a leader in laboratory automation.

Small footprint but huge flexibility

This compact and cost effective workstation fits on a 60 cm deep lab bench. The platform's countless worktable layout possibilities and the ability to integrate devices on all sides, make it a truly open platform. The worktable is easy to configure for every new assay.

User friendly and powerful software

It takes only one day for a Tecan automation engineer to install your Freedom EVO 75 and train

you to control your instrument using pre-defined methods. The Freedom EVOware® software contains never the less all the components to assist you when your application needs expand. All the potential is built in for optimizing liquid handling parameters, customizing the user interface, integrating multiple devices or scheduling tasks. And Freedom EVOware supports your regulatory and safety requirements with multilevel user management, audit trail, electronic records and electronic signatures.

Choice of washable fixed tips or disposable tips

Unlike many robots in this class, the Freedom EVO 75 uses not only disposable tips but it also offers the option to pipette with multi-use washable tips. This option allows for significant laboratory savings on the recurring costs of disposable tips.



Not just liquid handling: the new optional robotic manipulator arm further enhances the workstation capabilities

The new robotic manipulator arm increases the functionality of the workstation by moving microplates and disposable tip racks to and from other modules such as hotels, vacuum or magnetic bead separation modules and shakers. It can also load microplates into a plate washer and into a detection instrument such as the Tecan Sunrise reader, thereby enabling fully automated plate processing.

Adaptable, scalable solutions

In all aspects of modern laboratory procedures whether genomics, proteomics, cellular biology or analytical biochemistry, the Freedom EVO 75 has the capability and capacity to work for you and evolve with you. The many versatile uses of the Freedom EVO 75 include DNA extraction, PCR set-up, sample dilution, normalization and assay development.

Fully automated plate processing



Dimensions: W. 129.5 cm (34.8") x D. 70.0 cm (27.6") x H. 75.9 cm (29.9")



The worktable layout is freely configurable to meet your needs. For example, the worktable can hold 96 tubes of samples and controls and up to 6 assay plates on the deck.

Fully automated plate processing

A Freedom EVO 75 workstation supplemented with a Columbus™ Pro Washer and a Sunrise™ Plate Reader on a side worktable extension becomes a fully automated plate processor. The application output is increased and the space usage is maximized by adding up to two optional hotels, for plate or tip storage, or incubators, in the rear of the worktable.

Key Benefits:

- State of the art compact and cost effective workstation
- Excellent liquid handling performance with high reproducibility
- Tip flexibility: choice of disposable tips or cost saving washable multi-use tips
- Scalability and upgradeability ensuring investment protection and maximum resource usage.
- Easy to use software, with drag-and-drop user interface, along with pre-defined liquid handling and robotic tasks.
- Advanced process control capabilities and dynamic scheduling of multiple assays with the EVOware Plus software.
- Flexible assay set-up with the graphical interface of the optional EVOware Sample Oriented wizard.

Intended use of the product:

The Freedom EVO is an open automation platform product for general laboratory use. It is intended for routine laboratory tasks such as general purpose pipetting and general purpose liquid handling and robotic processes

Specifications

Hardware features

Arm configuration	One liquid handling arm, optional robotic manipulator arm		
Tip configuration	1 or 2 tips		
Tip variety	Washable (Teflon™-coated stainless steel), hard Teflon™ coating with full DMSO compatibility, short/long low volume, tips for access to 384 well microplates and disposable tips with or without filters (10/200/1000 µl)		
Tip movement	The tips in the 2-tip configuration have independent Z-movement and 18-mm-spacing in the Y direction.		
Positioning precision (repeatability)	X-axis	± 0.15 mm	
	Y-axis	± 0.15 mm	
	Z-axis	± 0.3 mm	
Robotic finger gripper range	58-140 mm		
Fast Wash pump	Ultra fast delivery of wash solution by diaphragm pump.		
Software	Freedom EVOware Standard – application development software.		
	Freedom EVOware Plus – advanced process scheduling capabilities		

Liquid handling features

Diluter	Cavro XP Smart diluter. (One or two diluters. One for each liquid-handling channel)		
Syringe sizes	50/250/500/1000/2500/5000 µl		

Safety features

Liquid level detection	Down to 50 µl of conductive liquid detectable in a round bottom 96-well microplate on standard carriers		
Low Disposable tip eject	Ejection of tips in contained environment to prevent aerosol distribution; also used for tip re-racking		
Safety screens	User activated interlocked screens prevent non-intentional access to work area* * For photographic clarity, the front safety screen is not always shown in the pictures.		

Password protection: Freedom EVOware offers three password levels: operator, application specialist and administrator

Dimensions W. 88.1 cm (34.7") x D. 69.6 cm (27.4") x H. 75.9 cm (29.9")

Weight 84 kg (165 lbs)

	Liquid handling arm	Liquid handling arm	Robotic manipulator arm
	(single arm instrument)	(Dual arm instrument)	(Dual arm instrument)
X-axis	65.5 cm (25.8")	54.5 cm (21.5")	54.5 cm (21.5")
Y-axis	32.0 cm (11.6")	32.0 cm (11.6")	32.0 cm (12.6")
Z-axis	20.0 cm (7.9")	20.0 cm (7.9")	24.5 cm (9.6")

Power requirements Power: 570 VA, Voltage 100–240 VAC, Frequency: 50/60 HZ

Operating conditions Temperature 15–32 °C/59–90 °F, Relative humidity 30–80% (non condensing) at 30 °C/86 °F or below

Regulatory compliance The Freedom EVO® 75 is CE marked

Computer requirements PC with Microsoft Windows XP SP2 Professional, 2 USB ports, SVGA monitor with 32768 colors or more and a minimum resolution of 1024x768 pixels, Hard disk with 5 GB of unused space.

Minimum for Freedom EVOware: 0.8 GHz, Pentium 3,512 MB Ram

Recommended for Freedom EVOware Plus: 3 GHz, Pentium 4,2 GB Ram

Tecan Group Ltd. makes every effort to include accurate and up-to-date information within this publication, however, it is possible that omissions or errors might have occurred. Tecan Group Ltd. cannot, therefore, make any representations or warranties, expressed or implied, as to the accuracy or completeness of the information provided in this publication. Changes in this publication can be made at any time without notice. All mentioned trademarks are protected by law. For technical details and detailed procedures of the specifications provided in this document please contact your Tecan representative. This brochure may contain reference to applications and products which are not available in all markets. Please check with your local sales representative.

© 2006, Tecan Trading AG, Switzerland, all rights reserved. Tecan® is in major countries a registered trademark of Tecan Group Ltd., Männedorf, Switzerland. Freedom EVO® and Freedom EVOware® are registered trademarks of Tecan Group Ltd., Männedorf, Switzerland.

Tecan Asia (Pte) Ltd., T +65 644 41 886, **Tecan Sales Austria GmbH**, T +43 62 46 89 33, **Tecan Benelux B.V.B.A.**, T +32 15 42 13 19, **Tecan Benelux B.V.B.A.**, T +31 18 34 48 17 4, **Tecan Group Ltd., Beijing Rep. Office**, T +86 10 586 95 936, **Tecan Deutschland GmbH**, T +49 79 51 94 170, **Tecan France S.A.S.**, T +33 4 72 76 04 80, **Tecan Italia S.r.l.**, T +39 02 215 21 28, **Tecan Sales International GmbH**, T +43 62 46 89 33, **Tecan Japan Co. Ltd.**, T +81 44 556 7311, **Tecan Nordic AB**, T +46 31 75 44 000, **Tecan Nordic AB, Rep. Office Denmark**, T +45 70 234 450, **Tecan Portugal**, T +351 21 000 82 16, **Tecan Sales Switzerland AG**, T +41 44 922 89 22, **Tecan Iberica Instr. S.L.**, T +34 93 490 01 74, **Tecan UK Ltd.**, T +44 11 89 300 300, **Tecan US Inc.**, T +1 919 361 5200