

ELx50™ Microplate Strip Washer



As a self contained and programmable instrument, the ELx50 Washer allows for full control of precise fluid delivery from the gentle dripping of a simple squeeze bottle to the full force of pressure delivery systems. The ELx50 is a flexible and modular design providing 96- and 384-well strip or plate washing capabilities unsurpassed in its class. Models with biomagnetic separation and vacuum filtration make the ELx50 an excellent choice for automating the wash steps of magnetic or polystyrene bead assays, such as those developed on the Luminex xMAP® technology platform. Custom magnets incorporate high-energy neodymium iron boron magnets for rapid separation of beads with superior retention. A fast and efficient filtration module allows vacuum to be fully adjustable and accommodate various filter pore sizes and sample viscosities.

The vacuum filtration module is also well suited for filtration-to-waste processes such as PCR cleanup after DNA amplification to remove unwanted residues or reaction by-products with filtrate. These separation capabilities build upon the ELx50's foundation as an automated washer for a laboratory's many traditional ELISAs and cell-based assays. Fully configured, the ELx50 is a 3-in-1 solution automating the wash steps of any magnetic bead, vacuum filtration, and ELISA-type process. As a welcome upgrade from manual processing, the ELx50 Microplate Strip Washer will bring to your lab an all inclusive wash solution offering consistent performance and unattended operation.

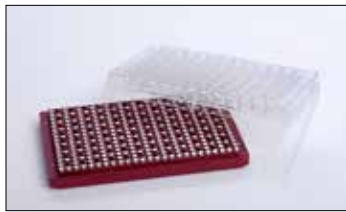


Features:

- Washes 96- and 384-well microplates
- Magnetic and polystyrene bead assays
- ELISAs and cell-based assays
- Filtration-to-waste processes
- Syringe drive fluid delivery system for precise control over all fluid flow rates
- Patented Dual-Action™ wash manifold for independent control of dispense and aspiration tubes
- Comprehensive onboard software makes programming quick and easy
- Automatic switching for up to three wash buffers
- Automated liquid level sensing
- Programmable shaking duration and intensity
- Integrated carrier priming trough for effortless setup
- Built-in maintenance programs



High Strength Biomagnetic Separation:



The ELx50's custom flat and ring magnet designs incorporate high-energy neodymium iron boron magnets for rapid separation of micrometer and nanometer beads with superior retention.

Fast and Efficient Vacuum Filtration:



An available vacuum filtration module automates the washing of filter bottom plates. Vacuum is fully adjustable for optimal performance with a range of pore sizes and sample viscosities.

Models:

Model	Part #	96-well only	96-/384-well	Buffer Switching	Biomagnetic Separation	Vacuum Filtration
ELx50™	ELX508	•				
	ELX508V	•		•		
	ELX508M	•			•	
	ELX508F	•				•
	ELX508MF	•			•	•
	ELX5012	•				
	ELX5012V	•		•		
	ELX5016		•			
	ELX5016V		•	•		

Optional Accessories:

- 8- or 12-channel manifolds (*model dependent*)
- 96-well magnets - choice of immobilization patterns
- Product Qualification Package



The ELx50 is Luminex xMAP® approved. xMAP® is a registered trademark of Luminex Corporation.



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Specifications:

Assays:	Magnetic bead, polystyrene bead (<i>model dependent</i>) <ul style="list-style-type: none"> • Multiplex assays • Bead-based ELISA ELISA Cell-based assays Protein arrays Filtration-to-waste processes (<i>model dependent</i>)
Microplate types:	96- and 384-wells (<i>model dependent</i>) Low profile and standard height Solid and filter bottom (<i>model dependent</i>) <ul style="list-style-type: none"> • Filter pore sizes 0.45 µm to 1.2 µm
Magnet:	High strength 96-well format <u>Flat</u> <ul style="list-style-type: none"> • Flat-bottom well – beads pulled to band across well bottom • Round-bottom well – beads pulled to button at well bottom <u>Ring</u> – beads pulled to 4-zone ring at well bottom
Onboard software:	Create, edit or run multiple protocols
Manifold types:	<u>96-well washing:</u> 8-tube (1x8) manifold 12-tube (1x12) manifold <u>96-/384-well washing:</u> Dual-Action™ 16-tube (1x16) manifold
Washing speed:	<u>Solid bottom plates:</u> 3 asp./disp. cycles: 300 µL/well, 96 wells, 8-tube manifold, final aspirate: ≤130 seconds <u>Filter bottom plates:</u> Variable, based on wash parameters
Fluid delivery:	One positive displacement syringe drive
Vacuum filtration:	Selectable vacuum levels (final at 30 seconds): <u>0.45 µm 96-well plates:</u> Low: -91 mmHg Medium: -150 mmHg High: -313 mmHg <u>1.2 µm 96-well plates:</u> Low: -95 mmHg Medium: -155 mmHg High: -299 mmHg Vacuum filtration time range: 1 – 180 seconds
Volume range:	25 – 3,000 µL/well (<i>model dependent</i>)
Buffer selection:	Automatic switching for up to 3 wash buffers (<i>model dependent</i>)
Wash cycles:	1 – 10
Dispense precision:	≤3% CV
Residual volume:	<u>Solid bottom plates:</u> ≤2 µL/well <u>Filter bottom plates:</u> Average increase weight of plate ≤1.2 g after dispensing 300 µL to 0.45 µm plate, filtration 30 seconds, low vacuum, blotted
Shaking:	Programmable in minutes and seconds up to 60 minutes Intensities – slow, medium, fast or variable
Soak Time:	Programmable in minutes and seconds up to 60 minutes
Power:	100 – 240 Volts AC 50/60 Hz
Dimensions:	14"W x 16"D x 6.5"H (35.6 x 40.6 x 16.5 cm)
Weight:	22 lbs (9.8 kg)

Regulatory

For In Vitro Diagnostic use. All BioTek microplate instrumentation is CE and TUV marked.

*Specifications subject to change