

# 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.

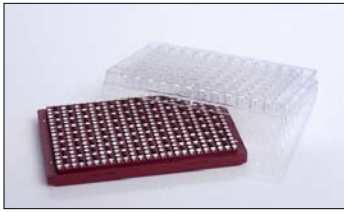
## Features:

- 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™	ELX50/8	•				
	ELX50/8V	•		•		
	ELX50/8M	•			•	
	ELX50/8F	•				•
	ELX50/8MF	•			•	•
	ELX50/12	•				
	ELX50/12V	•		•		
	ELx50/16		•			
	ELx50/16V		•	•		

## 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.



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## Specifications:

Assays:	Magnetic bead, polystyrene bead ( <i>model dependent</i> ): Multiplex assays Bead-based ELISAs ELISA Cell-based assays Protein assays Filtration-to-waste processes ( <i>model dependent</i> )												
Separation:	Biomagnetic separation, vacuum filtration ( <i>model dependent</i> )												
Microplate Types:	96- and 384-well plates and strips ( <i>model dependent</i> ) Standard height and low profile Solid and filter bottom ( <i>model dependent</i> ) Filter pore sizes: 0.45 µM to 1.2 µM												
Magnet:	Choice of high strength, flat or ring designs Removable for non-magnetic washing												
Vacuum Filtration:	Selectable vacuum levels: <table> <thead> <tr> <th></th> <th>0.45 µM</th> <th>1.2 µM</th> </tr> </thead> <tbody> <tr> <td>Low</td> <td>-91 mmHg</td> <td>-95 mmHg</td> </tr> <tr> <td>Medium</td> <td>-150 mmHg</td> <td>-155 mmHg</td> </tr> <tr> <td>High</td> <td>-313 mmHg</td> <td>-299 mmHg</td> </tr> </tbody> </table>		0.45 µM	1.2 µM	Low	-91 mmHg	-95 mmHg	Medium	-150 mmHg	-155 mmHg	High	-313 mmHg	-299 mmHg
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Medium	-150 mmHg	-155 mmHg											
High	-313 mmHg	-299 mmHg											
Manifold Type:	96-/384-well washing: 16-channel patented Dual-Action™, with separate dispense/aspiration (1 x 16) 96-well washing: 8-channel dispense/aspiration (1 x 8) 12-channel dispense/aspiration (1 x 12)												
Washing Speed:	Solid Bottom Plate Washing: ≤130 seconds (3-cycle wash, 300 µL/well, 1 x 8) Filter Plate Washing: Variable, based on wash parameters												
Wash Cycles:	1 - 10												
Volume Range:	25 - 3000 µL/well ( <i>model dependent</i> )												
Fluid Delivery:	Internal positive displacement syringe pump												
Buffer Selection:	Automatic switching for up to 3 wash buffers ( <i>model dependent</i> )												
Dispense Precision:	≤ 3% CV												
Residual Volume:	Solid Bottom Plate Washing: ≤ 2 µL/well												
Onboard Software:	2x24 character LCD display Create, edit or run up to 75 protocols Multiple pre-programmed maintenance protocols												
Soak Time:	1 - 600 seconds												
Shaking:	User-programmable speeds and timing												
Sterilization:	Chemical												
Dimensions:	Depth: 16" (40.6 cm) Width: 14" (35.6 cm) Height: 6.5" (16.5 cm)												
Weight:	22 lbs (9.8 kg)												
Power:	Compatible with 100 to 240 V~ ±10% at 50-60 Hz												

\*Specifications subject to change