

BioTek ELx50 washer

General	
Assays	Magnetic bead, polystyrene bead (model dependent)
	Multiplex assays
	Bead-based ELISA
	ELISA
	Cell-based assays
	Protein arrays
	Filtration-to-waste processes (model dependent)
Separation	Biomagnetic separation, vacuum filtration (model dependent)
Microplate Types	96- and 384-well (model dependent)
	Standard height and low profile
	Solid and filter bottom (model dependent)
	Filter pore sizes 0.45 μM to 1.2 μM
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
Magnet	High strength 96-well format
	Choice of two designs, custom for BioTek microplate washers:
	Flat
	- Flat-bottom well - beads pulled to band across well bottom
	- Round-bottom well - beads pulled to button at well bottom
	Ring - beads pulled to 4-zone ring at well bottom
	Incorporated into carrier, removable for non-magnetic washing
Safety/Convenience/Maintenance	Waste sensing, fluid detection (optional)
	Aerosol cover
	Overflow protection
	Pre-programmed maintenance routines
Onboard Software	2 x 24 character LCD display
	25 alphanumeric soft keys
	Create, edit or run multiple protocols
Operating Temperature	15°C to 40°C (59° to 104° F)

Humidity	10% to 85%, non-condensing
Electrical	Compatible with 100 to 240 V~ ± 10% @ 50-60 Hz
Washing	
Manifold Type	<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	Internal 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 to 180 seconds
Volume Range	25 - 3,000 µL/well (model dependent)
	Selectable in 1 µL increments
Buffer Selection	Automatic switching for up to 3 wash buffers (model dependent)
Flow Rates	
Wash Cycles	
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
Sterilization	Chemical:
	70% ethyl or isopropyl alcohol and 0.5% sodium hypochlorite solution
Supply Bottle Volume	2 L
Physical Characteristics	
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	

Regulatory	All BioTek microplate instrumentation is CE and ETL marked
Specifications are subject to change.	
Accessories	
Bottles & Tubing	
48140	Waste Bottle (2L) without cap
4070511	Waste Tubing Set for non-vacuum filtration ELx50 models
Manifolds	
4070512S	8-Channel Manifold
4070513S	12-Channel Manifold
4070519S	8-Channel Manifold with short dispense tubes
Miscellaneous	
4070035	Liquid Level Alert Kit for non-buffer switching ELx50 models
4070036	Liquid Level Alert Kit for buffer switching ELx50 models
4070517	Aerosol Cover
4070523	Stylus Kit
7102216	96-well Ring Magnet
7103016	96-well Flat Magnet
Product Qualification Packages	
4070530	ELx50 Qualification Package
4070566	ELx50 Qualification Package - for 8M, 8F and 8MF models
Test Plates & Reagents	
7773001	BioTek Solution #2 10X Concentrate Blue Test Dye (125 mL)
7773002	BioTek Solution #1 100X Concentrate Wetting Agent (125 mL)
Waste Systems	
48146	Vacuum Line Filter
4073009	Silencing muffler