

EL406™ Microplate Washer Dispenser

Efficiency and productivity are increased with BioTek's new EL406 Microplate Washer Dispenser. This automation friendly, multifunctional instrument uniquely combines the industry standard ELx405™ Washer with both peristaltic and syringe driven reagent pumping systems; all from the industry leader in microplate washing. The wash module incorporates BioTek's patented Dual-Action™ manifold design along with optimized flow rates for cell-based applications. The EL406 also features BioTek's built-in patent pending Ultrasonic Advantage™ for unattended wash manifold maintenance and up to four wash buffers for complex wash routines.

The peristaltic pump utilizes a unique design to provide accurate and precise volumes from 1 μ L to 3 mL. A range of autoclaveable cassette sizes is designed to deliver full incremental volumes for best performance. With two syringe drive dispensers, a total of three reagents can be dispensed without operator intervention. For biomagnetic separation, the EL406 offers full plate washing of magnetic microspheres used in a growing number of multiplex assays and bead-based ELISAs. Automate the entire process for up to 50 standard height microplates by adding a BioStack™. Now you can simply press a button and walk away.



Features:

- Fast microplate washing and dispensing
- Up to three reagent dispensers
- 1536-, 384-, and 96-well microplates
- Magnetic bead assays and standard ELISAs
- Automates long and tedious assay liquid handling processes
- Smaller benchtop or robotic system compared to separate washer and three dispensers
- Patented Dual-Action wash manifold for full microplate washing
- Optimized washing for loosely adherent cell layers
- Choice of software control from instrument keypad or Liquid Handling Control™ PC software
- Built-in, ultrasonic cleaner
- Automated switching of up to four wash buffers

COMBINATION WASHER DISPENSER



1536-well microplates are washed with two 32-tube dispense manifolds and one 128-tube aspiration manifold for speed efficiency.



For 384- and 96-well washing, BioTek's patented Dual-Action™ 192- and 96-tube manifolds provide independent control of aspirate and dispense functions for precise control of all washing parameters.

Models:

1536-/384-/96-well Washer with 3 Reagent Dispensers

1536-/384-well Washer with 3 Reagent Dispensers

1536-well Washer with 3 Reagent Dispensers

384-/96-well Washer with 1 or 3 Reagent Dispensers

384-well Washer with 1 or 3 Reagent Dispensers

Additional models available. See website for complete listing

Optional Accessories:

- Magnets - choice of 384- or 96-well formats
- Cassettes for peristaltic pump dispenser
- 2 syringe pump dispenser module
- Waste System – choice of 4L or 10L bottles, high flow* or standard vacuum pump, and 115V or 230V configurations
- Product Qualification Package
- BioStack™ Microplate Stacker
- Liquid Handling Control™ PC Software

**High flow vacuum pump recommended for 1536- or 384-well washing with buffers not containing surfactant.*



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Specifications:

Washing

Washing Speed:

(1 asp. / 1 disp. cycle) 300 µL/well, 96 wells, 96-tube manifold: 13 seconds
100 µL/well, 384 wells, 192-tube manifold: 17 seconds
10 µL/well, 1536 wells, 2 32-tube manifolds: 36 seconds

Volume Range: 3 - 3000 µL/well

Dispense Accuracy	Dispense Precision	Residual Volume
±3% typical	≤3% CV	≤2 µL/well

Dispensing – Peristaltic Pump

Dispensing Speed: 10 µL/well, 96 wells, 8-tip cassette: 8 seconds
5 µL/well, 384 wells, 8-tip cassette: 12 seconds
1 µL/well, 1536 wells, 8-tip cassette: 27 seconds

Volume Range: 1 - 3000 µL/well

Cassette Size	Recommended Volume Range	Dispense Accuracy	Dispense Precision
1 µL	1 µL to 50 µL	±5% typical at 1 µL	≤5% CV typical at 1 µL
5 µL	5 µL to 2500 µL	±2.5% typical at 5 µL	≤2.5% CV typical at 5 µL
10 µL	10 µL to 3000 µL	±2.5% typical ≥10 µL	≤2.5% CV typical ≥10 µL

Dispensing – 2 Syringe Pumps

Dispensing Speed: 10 µL/well, 96 wells, 16-tube manifold: 9 seconds
5 µL/well, 384 wells, 16-tube manifold: 11 seconds
3 µL/well, 1536 wells, 2 32-tube manifolds: 14 seconds

Volume Range: 3 - 3000 µL

Dispense Accuracy	Dispense Precision
±1 µL typical at 5 µL	≤10% CV typical at 5 µL
±1 µL typical at 20 µL	≤5% CV typical at 20 µL
±1% typical at 100 µL	≤2% CV typical at 100 µL

General

Microplate Types: 1536-, 384-, and 96-well

Standard height and low profile

Magnetic Field: 384-well separation

4,300 gauss

96-well separation

6,800 gauss

Shaking: User-programmable speed and timing

Dimensions: Depth: 18" (46 cm)

Width: 16.5" (42 cm)

Height: 12.5" (32 cm)

Weight: 32 lbs (14.5 kg)

Power: Compatible with 100 to 240 V~ ± 10% at 50-60 Hz

*Specifications subject to change

www.biotek.com