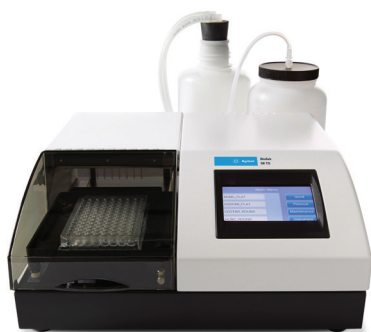


Agilent BioTek 50 TS Washer

Product description



The Agilent BioTek 50 TS washer is a compact microplate washing system with functionality that is unsurpassed in its class. The color touch screen provides a visual interface with menu-driven programming that makes creating protocols fast and intuitive. Its performance for conventional ELISA plate washing is excellent but the 50 TS offers much more. Its modularity makes it ideal for cell-based assay washing, biomagnetic separation, and vacuum filtration processes.

The 50 TS is an affordable choice for automating the wash steps of many applications in clinical and research laboratories. Used in conjunction with the Agilent BioTek 800 TS absorbance reader or other detection system, the 50 TS offers a welcome upgrade from manual processing—bringing convenience and consistently high-quality results to your laboratory's plate-washing workflows.



Figure 1. Programming and operating the Agilent BioTek 50 TS washer is intuitive and easy with the touch screen and menu-driven software.



Figure 2. Wash filter-bottom plates and magnetic-bead assays, available with some configurations.

Features

- Application versatility: ELISA, cell- and bead-based assays
- Color touch screen makes programming quick and easy
- Easy touch operation for washing full or partial plates
- Reliable and safe: liquid level sensing available
- Automated switching of up to three buffers for even greater automation
- Automated, built-in maintenance routines for continued reliable operation

Typical applications

- ELISA
- Cell-based assays
- Biomagnetic particle separation assays
- Filtration-to-waste protocols

Configurations

Configuration	Part #	96-Well Only	96-/384-Well	Buffer Switching	Biomagnetic Separation	Vacuum Filtration
50 TS	50TS8	•				
	50TS8V	•		•		
	50TS8M	•			•	
	50TS8MV	•		•	•	
	50TS8F	•				•
	50TS8MF	•			•	•
	50TS12	•				
	50TS12V	•		•		
	50TS16			•		
	50TS16V			•	•	

Optional accessories

- Liquid level alert system
- 4-, 8-, 8s-, 2 x 8- and 12-well manifolds
- 96-well magnets—choice of immobilization patterns
- Product qualification package



Figure 3. The Agilent BioTek 50 TS washer is ideal for pairing with the Agilent BioTek 800 TS absorbance reader for routine workflows.

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Technical details

General		
Microplate Types	24-, 96-, 384-well plates and microwell strips	
Shaking	Programmable in minutes and seconds up to 30 minutes, 5 intensities from 15 to 19 Hz	
Soak Time	Programmable in minutes and seconds up to 30 minutes	
Separation Methods	Biomagnetic separation ("M" configurations) Vacuum filtration ("F" configurations)	
User Interface	4.3" color LCD touch screen	
Onboard Software	<ul style="list-style-type: none"> – Up to 75 user-programmable protocols – Quick menu – Create or edit custom protocols – Run protocols created onboard or downloaded from the Agilent BioTek Liquid Handling Control (LHC) software 	
Software	Liquid Handling Control (LHC) for PC wash protocol programming and execution (optional)	
Washing		
Manifold Types	<ul style="list-style-type: none"> – 96-well washing: <ul style="list-style-type: none"> – 8-well (1 x 8) manifold, 2 x 8-well manifold, 12-well (1 x 12) manifold – 8-well short tube (1 x 8) manifold – 96-/384-well washing: Dual-Action 16-well manifold – 24-well washing: 4-well manifold 	
Volume Range	25 to 3,000 µL well	
Fluid Delivery	One positive displacement syringe drive	
Wash Cycles	1–10	
Buffer/Reagent Selection	Automated switching for up to three buffers ("V" configurations)	
Wash Speed		
Plate	Manifold	Speed
96 wells	2 x 8 wells	< 80 s for 12 strips (3 cycles, 300 µL/well, no soak)
96 wells	12 wells	< 908 s for 8 strips (3 cycles, 300 µL/well, no soak)
96 wells	8 and 8s wells	< 130 s for 12 strips (3 cycles, 300 µL/well, no soak)
384 wells	8, 16 wells	< 260 s for 24 strips (3 cycles, 100 µL/well, no soak)
24 wells	4 wells	< 60 s for 24 wells (1 cycle, 1120 µL/well, no soak)
Dispense Precision		
Plate	Manifold	Performance
96 wells	8 and 8s wells	≤ 3.0% CV when measured over six 300 µL-per-well dispenses of de-ionized water with 0.1% Tween 20.
96 wells	12 wells	≤ 3.0% CV when measured over four 300 µL-per-well dispenses of de-ionized water with 0.1% Tween 20.
384 wells	8, 16 wells	≤ 4.0% CV when measured over six 100 µL-per-well dispenses of de-ionized water with 0.1% Tween 20.
96 wells	2 x 8 wells	≤ 4.0% CV when measured over six 300 µL-per-well dispenses (whole plate) of de-ionized water with 0.1% Tween 20
24 wells	4 wells	≤ 4.0% CV when measured over six 1120 µL-per-well dispenses of de-ionized water with 0.1% Tween 20
Residual Volume		
Plate	Manifold	Performance
96 wells	8 and 8s wells	≤ 2.0 µL/well after 3-cycle wash, 300 µL/well dispensed
96 wells	12 wells	≤ 2.0 µL/well after 3-cycle wash, 300 µL/well dispensed
384 wells	8, 16 wells	≤ 4.0 µL/well after 1-cycle wash, 100 µL/well dispensed
96 wells	2 x 8 wells	≤ 4.0 µL/well after 3-cycle wash, 300 µL/well dispensed
24 wells	4 wells	≤ 50 µL/well after 1120 µL is dispensed per well
96 wells	Vacuum filtration	Average increased weight of the plate is < 1.2 grams after dispensing 300 µL of de-ionized water/well
Physical Characteristics		
Power	External 24 VDC power supply compatible with 100–240 VAC at 50–60 Hz. Power consumption: 40 Watts	
Weight	22 lb (9.8 kg)	
Dimensions	15" D x 15" W x 8" H (40.6 x 35.6 x 16.5 cm)	
Connectivity	One USB port for computer control	