

BW50

Microplate Washer

Instrumentation



As a self-contained and programmable instrument, the BW50 Microplate Strip Washer encompasses all applications. It allows for full control and precise fluidic delivery from the gentle dripping of a simple squeeze bottle to the full force of a pressure delivery system.

The BW50 Microplate Strip Washer is the perfect companion for BIOHIT's BP-series readers. The on-board software of the BW50 was designed to be programmed in the same format as the BP 800/808 Microplate Readers. This commonality allows the laboratory technician to easily develop both washing and data reduction protocols for those analytes of interest.

The operation of both products becomes easy and intuitive.

- Washes single strips or full plates
- Syringe drive fluid delivery system for precise operation
- Create, edit, delete and copy up to 75 custom protocols
- Auto-prime feature
- Bottom washing and crosswise aspiration
- Suitable for Immunoassay, DNA probe and cellular assays

BW 50 Microplate Reader

OVERVIEW

More than just an ELISA washer

A micro-controlled syringe drive positive displacement pump for fluid delivery and variable control of aspiration rates expands applications beyond the typical microplate washer.

The BW 50 washes all assays including:

- ELISA
- Fluorescence
- Chemiluminescence
- RIA
- DNA probes
- Cubic-spline
- Cellular assays: protect cell layers by gently dispensing buffer and slowly aspirating. With the precise placement of the aspiration tube depth, cell layer disruption is minimized. The precise micro-stepping syringe pump allows the BW 50 to be used as a rapid microplate dispenser.

Programming Flexibility

Whether you are simply automating basic washing protocols for routine clinical use or requiring ultra-low backgrounds and specialty washing for today's research applications, the BW50 will deliver the results you require. With the combination of new component technology and the intuitive user interface, assay protocols are easily programmed to perform the following functions:

- Wash
- Prime
- Dispense
- Aspirate
- Rinse
- Maintenance routines

Each program contains, among other parameters:

- Program name: user defined
- 75 protocols
- Wash cycles: 1-10
- Manifolds: 8-, 12-, or 16-channel
- Shaking time and intensity
- Soak time: 1-600 seconds
- Flow rate by volume, well, or second

More Efficient Washing

Lower background absorbance and reduced residual volumes are achieved with bottom washing and crosswise aspiration routines.

- Bottom washing: vigorous fluid dispensing at the well surface with high volumes of wash buffer for rapid dilution of reagent
- Crosswise aspiration: removes residual fluid by aspirating in two programmable well positions
- Programmable aspiration rates: reduce carryover and provide the ultimate in washing efficiency

Easy to use

Simply select the program and enter the number of strips. The BW 50 will do the rest.

Automatic Buffer Switching

- Optional on all models
- Switches to the appropriate buffer/rinse solution
- Rinses fluidic system

Maintenance is Simple

The modular design allows for easy maintenance. The press of a button initiates the following preprogrammed protocols.

- Rinses the fluidic system automatically
- Flushes the manifold
- Soaks the manifold in wetted condition
- Primes system automatically

Safety

The BW 50 was built with safety in mind.

- Aerosol cover included
- Decontamination routine built in
- Electronics isolated from fluidics
- Protocols can be protected from alteration

SPECIFICATIONS

Plate type	All 96-well plates and trips
Dispense precision	<2.5%CV typical (any model)
Residual volume	<4 µl well depending on plate type and aspiration protocol
Fluid delivery	Internal positive displacement syringe pump
Buffer selection	Valve module option - up to 3 buffers
Wash cycles	1 to 10
Dispense volume	50 to 3000 µl per well
Soak time	1 to 600 seconds
Shaking	User-programmable speeds and timing
Keypad	Membrane keypad with 25 keys
I/O	RS232 port for PC interface
Dimensions	40.6 x 35.6 x 16.5cm (16"D x 14"W x 6.5"H) Weight 8.9 kg (20 lbs)
Power	100-240 VAC, 50/60 Hz
Regulatory	CE Mark CAN/CSA C22.2 No. 1010.1-92 EN 6101-1 ETL electrical safety testing label For in-vitro diagnostic use

Cat. No.	Ordering information
740050	BW50 8ch Microplate Washer
740051	BW50 16ch Microplate washer for 384-well microplates