

Quadra Wash²™

96/384 Lab-ware washing workstation

At-a-Glance

Interchangeable wash heads 96 or 384 removable for cleaning

Programmable wash cycle

Multiple combinations of wash soak and aspirate recalled from memory

Optional Bi-Directional Plate stackers

Automated wash and waste collection

TOMTEC Quadra Wash²

The Quadra Wash² workstation is a small footprint – self contained, automated microtiter plate washing station, ideal for both biochemical assays such as ELISA and/or cell-based workflows. The unit supports washing cycles with two different concentrations of buffered solutions, such as Phosphate Buffered Saline (PBS) and/or water. Dispense/aspirate volumes and rates are set with simple pressure/time adjustments allowing the user to program repeatable fill/dispense volumes at known rates with integrated volume check function, which provides feed-back for quality control. Two separate inputs are provided for buffered solution, used in the wash cycle. The solutions are contained in a 10 Liter pressurized (2 - 5psi) PVC bottle. The effluent from the wash cycle can be aspirated to, and retained in, an Autotrap™. The Autotrap is equipped with a high level float that prevents overflows. It can also be emptied to a waste disposal system at the flip of a switch, by pressurizing the container from the Quadra Wash² control panel.

The instrument is available with two separate heads for 96 or 384-well assays. Both heads are based on a unique concentric wash/aspirate needle design which can be set up to a depth of 0.7 inches. The assay sits on a platform that can be programmed to move in an x/y pattern during an aspirate/dispense cycle to maximize well-bottom wash coverage. To ensure uninterrupted use, the modular design allows the user to detach and wash the polypropylene/stainless steel head between runs.

The instrument is programmed via a simple integrated user interface. The user can program multiple “named” wash cycles of dispense, soak and aspirate time-pressure intervals - no external PC is needed. Each wash cycle can be programmed, saved and recalled from memory supporting walk-away automation.



Bi-Directional Cassette Stackers

An optional microplate stacker is available to enable walk-away automation. The stacker will support up to 25 standard assays per run. The Quadra4™ liquid handling workstation, Quadra Wash2 and Autoseal™ together provide all the utility needed to automate an ELISA workflow for up to 25 plates per run. The Quadra4 coats the assays, the Autoseal™ hermetically seals for overnight incubation and the Quadra Wash2 preps. These three steps are repeated as needed.



Applications

- Biochemical assays such as Sandwich enzyme-linked immunosorbent assay (ELISA)
- Cell-based assays where weakly adherent cells are washed from an assay
- Preparation of assays for Fluorescent Imaging Plate Reader™ (FLIPR™) technology to measure Ca2+ flux in cells.
- Preparation of assays for multimode reader for Luminescence, Fluorescence, and Absorbance.
- Assay washer to remove adhered polypeptides

Specification	Value	Dimensions
width	17	inches
depth	18	inches
height	22	inches
weight	80 (less Autotrap)	pounds
power	490	watts
compressed air source	10 to 40	psi
vacuum	20	inches of mercury

