## C.WASH™ PLUS

# The Power Of A Microplate Washer. Taken Further.



The all-new C.WASH PLUS combines a high throughput, automation-ready and patented centrifugal plate washer with precise and dedicated dispensing capabilities for multi-reagent immune and cell-based assays in 96-, 384- and 1536-well plate formats.



#### Non-contact, centrifugal liquid washing:

Ensures sterile cell work. No carryovers. No contamination. No use of pipette tips.



#### Automate entire assays:

12 liquid inputs and the new precision dispenser make it ideal for automating assays such as ELISA or cell staining & washing procedures.



#### Ultra-low residual volume:

Spin your way to 99.5% washing efficiency with less than 0.1  $\mu$ l residual volume and drastically less waste.



#### Programmable versatility:

With the C.WASH PLUS software, tailor your lab's workflow like a pro. Customize dispensing, tweak volumes, pause on demand – the control is all yours; end-to-end.



#### Cell-friendly dispensing:

Plate perfection: C.WASH nails precise positioning, low-volume dispensing, and gentle evacuation, making cell detachment in 96- to 1536-wells a thing of the past.



#### Effortless maintenance:

Our instrument self-cleans like a dream. Just hook up the solution, hit 'clean', and watch it scrub its insides – rotor to head. Lazy maintenance, lasting performance.

### Oh. So. Plus.

- Compatible with any SBS format 96-, 384and 1536-well plates
- ✓ Residual volume of <0.1 µl per well for all plate formats
- ✓ Unmatched washing efficiency of >99.99% after only 2 wash cycles
- Low to zero dead volume enabled by all-new dedicated and precision dispensers

## Impact Areas

- ✓ Assay Automation
- Immunoassays (e.g. ELISA plate washing and multiplexed protein assays such as MSD)
- Cell Washing Adherent and Suspension Cells
- ✓ Plate Coating
- ✓ Washing in 1536-well format (HTS)

Media Exchange



Intrigued? Get in touch.



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## **Technical Specifications**

| Liquid Removal               |   |  |
|------------------------------|---|--|
| Plate compatibility (format) | 96, 384, 1536   |  |
| Plate compatibility (height) | standard 14.4 up to 20.1 mm with customized carrier           |  |
| Residual volume              | $< 0.1\mu I$ per well for all plate formats                   |  |
| Centrifugal forces           | 5 to 3500 rpm (450g)   max acceleration/deceleration 2000 rpm |  |

| Standard Dispenser (Membrane Pump & Electromechanical Valve) |   |  |  |
|--|---|--|--|
| Dispense head  | 8-needle, 16-needle   |  |  |
| Liquid inputs  | 2 dedicated, 6 shared (Auto switching (internal) for up to 6 liquid input channels) |  |  |
| Dispensing accuracy & precision (standard dispenser)         | <10% CV @ 30 μl standard  |  |  |
| Adjustable dispense pressure                                 | yes (3 levels)  |  |  |
| Deadvolume internal (Tube volume)                            | 8 ml multiplex  |  |  |
| Deadvolume (Liquid switch/priming)                           | down to 0 µl (dedicated dispense heads)   |  |  |
| Volume range standard dispenser                              | 8-needle dispense head: > 10 µl<br>16-needle dispense head: > 5 µl                  |  |  |
| Dispense speed - 96-well (50 μl)                             | 11 seconds  |  |  |
| Dispense speed - 384-well (25 μl)                            | 15 seconds  |  |  |

| Precision Dispenser (Pressure-Over-Liquid)            |                            |  |  |  |
|---|----------------------------|--|--|--|
| Dispense head   | 8-needle mounted on y-axis |  |  |  |
| Liquid inputs   | 4                          |  |  |  |
| Adjustable dispense pressure                          | yes                        |  |  |  |
| Deadvolume  | 3 ml                       |  |  |  |
| Dispensing accuracy & precision (precision dispenser) | <5% CV @ 2 µl              |  |  |  |
| Volume range precision dispenser                      | down to 2 µl               |  |  |  |
| Dispense speed - 96-well (100 µl)                     | 24 seconds                 |  |  |  |
| Dispense speed - 384-well (50 μl)                     | 63 seconds                 |  |  |  |
| Dispense speed - 1536-well (5 µl)                     | 180 seconds                |  |  |  |

|   | Washing Speed |  |
|---|---------------|--|
| Processing speed 96-well 1 wash cycle               | ≤ 43 seconds  |  |
| Processing speed 96-well 2 wash cycles              | ≤ 60 seconds  |  |
| Processing speed 384-well 1 wash cycle              | ≤ 54 seconds  |  |
| Processing speed 384-well 2 wash cycles             | ≤ 70 seconds  |  |
| Processing speed 1536-well 1 wash cycle (precision) | ≤ 3 minutes   |  |

# Liquid Waste System Active Pump for rapid liquid removal from wash drum

| Miscellaneous          |   |  |
|------------------------|---|--|
| Plate positioning      | band drive + linear magnetic sensor; accuracy: +/-100 µm    |  |
| User interface         | Touchpad (included)   |  |
| Automation             | SiLA2 interface is compatible with third-party integration  |  |
| Washing efficiency     | > 99.5% after 1 wash cycle,<br>> 99.99% after 2 wash cycles |  |
| Dimensions (W x D x H) | 410 x 615 x 300 mm  |  |
| Weight                 | 35.2 kg   |  |

\*C.WASH PLUS centrifugal washer products are manufactured under an exclusive license from Yantai Ausbio Laboratories.

#### Resources

Learn more about the power of the platform





Tip Consumption Calculator





Application Notes





Wall of Love



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