TITERTEK BERTHOLD

MAP-C2 Workstation

The MAP-C2 is a compact and versatile high throughput liquid handling workstation designed for fully automated assay processing in 96- and 384-well plates. MAP-C2 delivers constant and reliable performance for a wide range of applications, from common to unique, and from well-known to obscure such as the following:

· ELISA processing
· Agar dispensing
· Enzymatic assays processing
· Plate coating for small-scale production
· Multiplex assays processing
· Binding assays processing
· And many more…

Titertek's proprietary syringe drive is the foundation of the MAP-C2's high performance. It facilitates accurate and precise dispensing for a wide volume range. The remarkably robust syringe drive design allows easy and effortless viscosity independent dispensing. MAP-C2 will dispense extremely viscous solutions such as agar and PCR grade oil as easy as an aqueous solution.

The MAP-C2 base unit comes pre-equipped with two syringe drives. Three additional auxiliary Dispense Modules can be connected to the base unit for a total of 8 syringe drives. Each syringe drive supports wash and dispense functions. Every syringe drive can handle high precision dispensing in the microliter range and high volume bulk dispensing, depending on the syringe package selected. The syringes are interchangeable without calibration.

To further increase assay processing flexibility, the MAP-C2 can accommodate 96-channel washing or 8-channel column washing hardware. The 96-channel wash head provides a simultaneous wash of all 96 wells of 96-well plates or quadrant wash of 384-well plates. The optional Multiple Inlet Reagent Station allows an addition of up to 8 different reagents or wash buffers using the same liquid path.

- **Processes thin, regular and deep well pates (96- and 384-well)**
- **PC controlled exact timing of each processing step**
- **4-, 8- and 16-channel dispensing**
- **5 µl to 300 µl dispense range**
- **96-channel and 8-channel column wash options**
- **Superwash capability (continuous high volume wash)**
- **On-deck lateral shaking**
- **Inert liquid path**
- **Optional integration of microplate readers and other microplate devices**

TITERTEK BERTHOLD

MAP-C2 Workstation

Performance Specifications	
Microplate Types	96- and 384-well
Wash Manifolds	96-channel, or 8-channel column
Dispense Precision	1–2000 µl selectable in 1 µl increments
Residual Volume	< 2 µl/well
Wash Mode	Regular and Superwash
Stacker Magazines	30, 45, and 60 microplates
Wash Fluid Selection (Option)	Automatic switching for up to 4 wash fluids

Dispense	Two 4-in-1 1 ml Syringes	Two 10 ml Syringes
Number of Reagents	1	up to 2
Liquid Delivery	8 independent tips	8- or 16-tip manifold, each channel
Dispense Volume	5–300 µl	5–300 µl
Dispense Accuracy	± 1 % @ 5–100 µl range	± 1 % @ 5–100 µl range
Dispensing Precision	≤ 2.5 % CV @ 20–100 µl range ≤ 3.5 % CV @ 10 µl ≤ 3.5 % CV @ 5 µl	≤ 3 % CV @ 20–100 µl range ≤ 5 % CV @ 10 µl ≤ 7.5 % CV @ 5 µl

Plate Processing Speed	
Wash **	1 cycle, 300 µl: 15 s (96-well plate) 3 cycles, 300 µl each: 25 s (96-well plate) 3 cycles, 75 µl each: 44 s (384-well plate)
Dispense	50 µl add-on dispense, after wash: 12 s

General Specifications	
Dimensions (WxDxH)	83 x 50 x 57 cm; 33 x 19.5 x 23.13 inch *
Weight	36 kg; 80 lb
Power Consumption	180 VA maximum
Power Requirements	230 V 50 Hz; 115 V 60 Hz
Interface	USB, Serial Interface (RS-232)
Operating Temperature	5–40° C; 41–104° F

* including two 30-microplate magazines
** 96-channel wash manifold.

Berthold Detection Systems GmbH Bleichstrasse 56–68, D–75173 Pforzheim, Germany · Phone +49 (0)72 31/92 06-0 · Fax +49 (0)72 31/92 06-50 · contact@titertek-berthold.com · www.titertek-berthold.com
Titertek Instruments, Inc. 330 Wynn Drive, Ste. 100, P.O. Box 5870, Huntsville, AL 35805, USA · Phone 256.859.8600 · Toll-free 888.848.3783 · Fax 256.850.8671 · inquiry@titertek.com · www.titertek-berthold.com