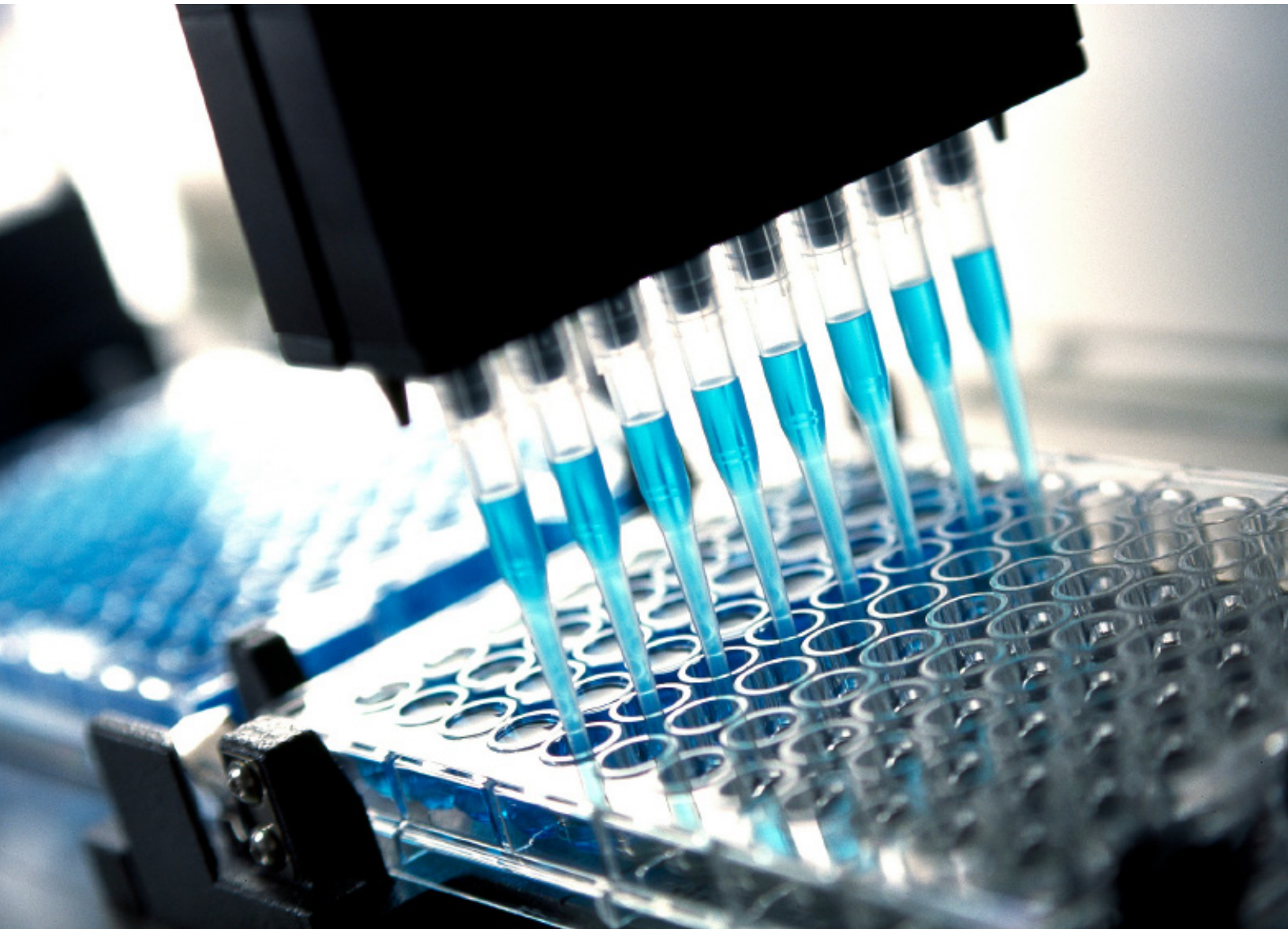


About Moduline Systems

Moduline Systems develops microplate coating & washing systems and liquid handling equipment capable of small pilot runs, as well as high-volume production lots.

Our focus is providing high quality, automated, and economical equipment to organizations in the biotech industry.

Product Catalog



Moduline Systems Inc. has manufactured microplate & vial filling equipment for the IVD industry and researchers since 1994.

www.moduline.com

MICROPLATE PROCESSING

300 DMC Microplate Dispensing System

The 300 DMC Microplate Dispensing System is the best choice for highly accurate, precise and reproducible Microplate dispensing applications in a production environment. Up to 4 DMC's can be configured to a single dispense conveyor, resulting in a throughput of over 1,000 dispensed microplates per hour, while maintaining CV below 2%.

Features

- 350 plates/hour @ 100µL dispense with <2% CV
- Expandable to >1,000 plates/hour
- 96 and 384 well plates and vial filling capable
- 8 independent channels
- Long-life rotary shear valves
- Expandable to >1,000 plates/hour
- 96 and 384 well plates and vial filling capable
- 8 independent channels
- Long-life rotary shear valves
- Full quadrature encoder for absolute syringe positioning
- Top mounted LCD input panel
- Stepper driven precision screw thread syringe drive with 6000 step resolution
- Program retention
- Accuracy within $\pm 1.0\%$ with 1 mL syringe (full stroke)
- Precision within 0.05 % CV with 1 mL syringe (full stroke)
- PTFE or UHMWPE syringes
- Manual and automatic dispensing of 1 to 8 channels

Accuracy & Precision

Dispense Accuracy	Dispense Precision
$\pm 1.0\%$ with 1 mL syringes	0.05% CV with 1 mL syringes

Specifications

Throughput with Moduline Systems Conveyor

Plates Per Hour	Dispenser Configuration
330	DMC-B
537	DMC-B x2
925	DMC-B with 48-port manifold

Dimensions:

Component	Footprint	Height	Weight
Conveyor	57.0" x 8.0 in (144.78" x 20.32 cm)	8.5 in (21.59 cm)	18.00 lb. (8.12 Kg)
DMC-B	6 x 7.88 in (15.24 x 20 cm)	13.19 in. (33.50 cm)	13 lb (5.9 kg)
*34" (86.36 cm) for conveyor + 23" (58.42 cm) for off ramp			

Precision:

Standard Syringe Sizes	1.0 mL	2.5 mL	5.0 mL
Resolution	1.0 µL	10.0 µL	50.0 µL
Range	5.0 µL – 1,000 µL	10.0 µL to 2,500 µL	50.0 µL to 5,000 µL

Environmental (Operating):

Temperature	15° C to 40° C (59° F to 104° F)
Humidity	20% to 95% RH at 40° C (104°F)

MICROPLATE PROCESSING

300-96WW Dual Microplate Washing System

The 300-96WW System offers fast and reliable plate washing at a reasonable price. Multiple programs allow for independent washing, dispensing and aspirating modes simultaneously. Aspiration leaves your plates with less than 1 μ L residual.

Features

- Stand-alone wash and aspiration unit
- Up to 6 wash cycles (fill and aspirate) per pass
- Coaxial wash/aspirate manifold provides fast dispensing & thorough aspiration
- Gentle and complete aspiration of each well – less than 1 μ l residual
- Universal logic interface compatible with all Moduline Systems dispensers
- Operating programs are self-contained – no external computer required

Typical Applications

High Throughput Microplate:

- Washing
- Blocking Buffer Dispense
- Aspirating

Functions

- Wash (Aspirate - Dispense - Aspirate)
- Aspirate Only
- Aspirate & Dispense
- Dispense

Specifications

Throughput - Plates Per Hour with 3 second final aspiration:

	Single Wash Station	Dual Wash Station
Cycles	Plates Per Hour	Plates Per Hour
Aspirate Only	330	595
2	216	388
3	160	288

Dimensions:

Component	Footprint	Height	Weight
Conveyor	57.0" x 8.0 in (144.78" x 20.32 cm)	8.5 in (21.59 cm)	18.00 lb. (8.12 Kg)
Wash Pump	4 x 12 in (10.16 x 30.48 cm)	7.5 in (19.05 cm)	7.75 lb. (3.52 Kg)
Vacuum Pump	10 x 22 in (25.40 x 55.88 cm)	10 in (25.40 cm)	25.00 lb. (11.34 Kg)
Waste Reservoir	11 x 11 in (27.94 x 27.92 cm)	17.25 in (43.82 cm)	2.75 lb. (1.23 Kg)

*34" (86.36 cm) for conveyor + 23" (58.42 cm) for off ramp

Power Requirements:

Conveyor	15V DC @ 7.5VA (supplied by wash pump / dispenser)
Wash Pump	110 or 220 VAC – 1.75 amps
Vacuum Pump	110 or 220 VAC – 201 / 1 - 1.0 amps

Environmental (Operating):

Temperature	15° C to 40° C (59° F to 104° F)
Humidity	20% to 95% RH at 40° C (104°F)

MICROPLATE PROCESSING

TriFLEX Microplate Coating & Washing System

Increase your productivity with a dual-functioning microplate washing and dispensing system. The TriFLEX system is a self-contained, single operator, easy to use system. Take advantage of high precision plate coating and fast & efficient washing at an affordable price.

Features

- Dual function – Microplate washing and filling in one pass
- Stand-alone wash & aspiration unit
- Universal logic interface compatible with all Moduline dispensers
- Operating programs are self-contained – no external computer required
- Coaxial wash / aspirate manifold provides fast dispensing and thorough aspiration
- Gentle and complete aspiration of each well – less than 1µL residual

Typical Applications

High Throughput Microplate:

- Microplate Coating
- Washing
- Blocking Buffer Dispense
- Aspirating

Functions

- Wash (Aspirate - Dispense - Aspirate)
- Aspirate Only
- Aspirate & Dispense
- Dispense

Specifications

Throughput - Plates Per Hour

Wash Function	1 sec.	2 sec.	3 sec.
Final Aspiration Time	1 sec.	2 sec.	3 sec.
3 Cycle Wash	194	180	160
2 Cycle Wash	249	230	216
Aspiration Only	660	530	330

Dispense Function

Plates Per Hour	Dispenser / channels
330	DMC-B / 8
537	2 x DMC-B / 8
925	DMC-B with 48 port manifold
180	Model A / 8 port manifold
280	Model A / 16 port manifold
340	2 x Model A / 8 port manifold
480	2 x Model A / 16 port manifold

Dimensions:

Component	Footprint	Height	Weight
Conveyor	57.0" x 8.0 in (144.78" x 20.32 cm)	8.5 in (21.59 cm)	18.00 lb. (8.12 Kg)
Wash Pump	4 x 12 in (10.16 x 30.48 cm)	7.5 in (19.05 cm)	7.75 lb. (3.52 Kg)
Vacuum Pump	10 x 22 in (25.40 x 55.88 cm)	10 in (25.40 cm)	25.00 lb. (11.34 Kg)
Waste Reservoir	11 x 11 in (27.94 x 27.92 cm)	17.25 in (43.82 cm)	2.75 lb. (1.23 Kg)
*34" (86.36 cm) for conveyor + 23" (58.42 cm) for off ramp			

Power Requirements:

Conveyor	15V DC @ 7.5VA (supplied by wash pump / dispenser)
Wash Pump	110 or 220 VAC – 1.75 amps
Vacuum Pump	110 or 220 VAC – 201 / 1 - 1.0 amps

Environmental (Operating):

Temperature	15° C to 40° C (59° F to 104° F)
Humidity	20% to 95% RH at 40° C (104°F)

VIAL FILLING

Protégé Vial Filling Platform

The Protégé Vial Filling Platform features reliable, precise, and accurate dispensing in a simple, compact design. Accomplish numerous filling arrangements by utilizing the flexible configuration and simple setup provided by the Protégé. Use your own vial or bottle racks combined with the Protégé's easy XY setup to accomplish your filling needs. Eight independent channels allows the operator to fill a different liquid for each row at the same time. The Protégé gives eliminates the need for hand-operated filling, reducing your overall production time and labor cost.

Features

- 10µL to 5mL dispense range
- Reliable, precise, and accurate dispensing
- Up to 8 different solutions simultaneously
- Compact and stand-alone design
- Easy XY programming
- Flexible configuration
- Use your own bottle trays/racks

Typical Applications

- Microvials
- Bottles
- Tubes

Accuracy & Precision

Dispense Accuracy	Dispense Precision
±1.0% with 1 mL syringes	0.05% CV with 1 mL syringes

Specifications

Throughputs (15 rows x 8 vials / row):

Fill Volume (ml)	Single Wash Station (Vials/hr)*1	Dual Wash Station (Vials/hr)
0.25	21,250	21,000
0.5	18,250	17,000
1	15,500	13,000

Dimensions:

Component	Footprint	Height	Weight
Filling Platform	7.0 x 20.375 in.	11.875 in. *2	7.5 lb.
	(17.78 x 51.783 cm)	(30.163 cm)	(3.40 Kg)
DMC-B	6 x 7.125 in. *3	13.188 in	13 lb.
	(15.25 x 20.00 cm)	(33.50 cm)	(5.9 kg)

Power Requirements:

100 - 240 VAC, 50 - 60 HZ @ 20 VA

Environmental (Operating):

Temperature	Humidity
15°C to 40°C (59°F to 104°F)	20% to 95% RH at 40°C (104°F)