

215 Direct-Inject Liquid Handler/Injector



Precise Micro-Volume Injection

- Designed to handle the demands of smaller injection volumes—delivers microliter volumes with precision and accuracy
- Capable of injecting volumes of 500 nL to 5 mL from 96- or 384-well microplates, vials or tubes
- Ideal for injecting 1 μ L (or less) directly into the 841 Injection Module to minimize carryover and maximize precision; can also accommodate large-volume injections without reconfiguration
- Increases throughput with valve switching speeds five times faster than the standard 215 Liquid Handler/Injector
- Accommodates up to 17 standard- or deep-well microplates
- Add a second 841 Injection Module to increase throughput while preserving bench space
- Optional Peltier Racks for cooling and heating of samples in standard microplates

Technical Specifications

Arm Speed	X: >45.7 cm/sec (>18 in./sec) Y: >40.6 cm/sec (>16 in./sec)	
Communication Interface	RS-232 or GSI0C; Four inputs (contact closure, TTL or open-collector), four relay outputs, and one switched +24V DC 1A output	
Front Panel	START and emergency STOP soft keys	
Display Panel	8-character LCD	
Horizontal Motion Strength	X: 5 kg (11.1 lbs.) Y: 7 kg (15.6 lbs.)	
Injection	Volume: 500 nL–5 mL Reproducibility: 1.5% CV Carryover: <0.05% with 100- μ L syringe and total loop filling method Valve switching speed: <100 ms	
Liquid Handling	Reproducibility: 1.37% CV with 50 μ L of water Accuracy: 99.7% with 50 μ L of water	
Locator Plate Capacity	Up to five Code 200-Series racks, up to seven Code 20- or 30-Series racks (or a combination of up to five racks of both types), or one Code 500-Series and one Code 200-Series rack	
Manufacturing Standards	Meets applicable Safety and EMC certification standards; UL and CE certified	
Maximum Syringe Flow Rates for Water	Syringe Size (μL)	Max. Flow Rate (mL/min)
	100	3.37
	250	8.43
	500	16.87
	1,000	33.75
	5,000	100.00
	10,000 25,000	100.00 100.00
Power Requirements	Frequency: 50–60 Hz Voltage: 100–120 and 200–240V, mains voltage fluctuations not to exceed \pm 10% of the nominal voltage Current rating: 2.0A for 100–120V or 1.0A for 220–240V	
Probe Positioning Performance	Accuracy: \pm 0.5 mm in X/Y dimensions, \pm 1 mm in Z dimension Repeatability: \pm 0.25 mm in X/Y/Z dimensions	
Probe Rinse	Through a dedicated rinse station for rinsing the inside and outside of the probe; selectable rinse volume and flow rate. Optional inserts for level-sensing, nonleveling-sensing and flow rinse	
Sampler Type	X/Y/Z with stationary rack design	
Software	Via Gilson UniPoint™ System Software or TRILUTION™ Software	
Syringe Pump	Integral, high-precision, single-piston	
Syringe Capacity	100, 250 or 500 μ L; 1 or 5 mL	
System Resolution	0.1 μ L	
Vertical Punch Strength	4.1 kg (11.0 lbs.)	
Dimensions (w x d x h)	91.4 x 61 x 55.8 cm* (36 x 24 x 22* in.) *Maximum height. Z-arm height is adjustable to accommodate vessel heights between 1 and 150 mm (dependent on installed Z-arm).	
Weight	39.9 kg (89 lbs.)	

For applications or additional information, contact your local Gilson Technical Sales Representative or visit www.gilson.com.

Gilson, Inc. World Headquarters
Middleton, WI 53562 USA
Telephone: 800-445-7661 or 608-836-1551
Fax: 608-831-4451

Gilson S.A.S.
19, avenue des Entrepreneurs
F-95400 VILLIERS LE BEL France

www.gilson.com
sales@gilson.com, service@gilson.com, training@gilson.com

