

## **Syringe Pump Specifications**

## **Mechanical and Electrical:**

Maximum number of syringes:
Minimum syringe size:
Maximum syringe size:
60 mL

• Motor type: Step motor, 24 Volts, 1.8° per step

• Motor steps per revolution: 200

• Micro stepping: 1/32 to 1/2 depending on motor speed

• Advance per step: 156 nm to 5 µm depending on stepping speed

Power connector:
 Power supply:
 Dimensions:
 2.1mm, center positive, DC
 24 V/3 A, standalone adapter
 216 mm x 188 mm x 121 mm

• Weight: 2 kg

## **Operational:**

- Holds 2 Syringes, with recommended or user specified sizes
- Easy-to-use on-device key interface with 16x2 Character LCD
- Fully programmable; Automation capable
- operates in stand-alone mode or from a computer
- Non-volatile memory to store user-applied settings (Restorable to default settings)
- Manual infusion or withdraw using on-device keys
- Programmable Infusion/Withdraw rates from 0.3 μL/min (1 mL Syringe) to 1799.1674 mL/h (60 mL Syringe)
- Trigger Mode:
  - o Triggered infusion with external square wave (standard 5 Volts) trigger
  - User programmable syringe type and infusion rate
- Simulation Mode:
  - o 8 programmable phases with separate rates for each phase
  - o Infusion/Withdraw mode for each phase
  - Each phase can be constrained by either time or dispensed volume
  - o Simulation procedure can be paused or stopped at any time
- 3 years warranty



Syringe Type	Dimension Limits (inner diameter)			Infusion Limits			
	Min (mm)	Recommended (mm)	Max (mm)	$mL_{ig/min}$		mL/h	
				Minimum	Maximum	Minimum	Maximum
1 mL	4.606	4.699	9.538	0.0003	0.9365	0.0162	56.1883
3 mL	8.585	8.585	9.65	0.0009	3.1258	0.0542	187.5493
5 mL	10.3	11.99	13	0.0018	6.0971	0.1057	365.8249
10 mL	14.43	14.43	15.9	0.0026	8.8311	0.1531	529.8678
20 mL	19.05	19.05	23.03	0.0044	15.3912	0.2668	923.4744
30 mL	21.59	21.59	23.52	0.0057	19.7692	0.3427	1186.1515
60 mL	26.59	26.59	29.7	0.0087	29.9861	0.5198	1799.1674