



IPS-12R Syringe Pump

Single Channel Infusion/Withdrawal Pump

The IPS-12R enables both infusion and withdrawal operations in a single channel. Flow rate and direction can be easily adjusted during use. It is suitable for applications that require bidirectional and flexible flow control.

SYRINGES	
CAPACITY	1
TYPE	Glass, plastic, steel
MIN SIZE	Hamilton 0.5 µl (ID:0.103mm)
MAX SIZE	Monoject 140 ml (ID:38mm)
FLOW RATE	
MIN	17.89 pl/min (Hamilton 0.5 µl)
MAX	121.51 ml/min (140 ml Monoject Syringe)
ACCURACY	< 3%
REPRODUCIBILITY	< 3%
MOTOR SPECIFICATIONS	
MOTOR TYPE	Stepper Motor
MOTOR DRIVE CONTROLLER	Microcontroller with Microstep Drive
STEP RESOLUTION (TRAVEL/MICROSTEP)	357 nm/µstep
MIN STEP RATE	10 sec/µstep
MAX STEP RATE	200 µsec/µstep
MIN LINEAR SPEED	2.14 µm/min
MAX LINEAR SPEED	107.14 mm/min
LINEAR FORCE	20 kg (44 lbs)
GENERAL SPECIFICATIONS	
RECIPE SAVE-RECALL	No
POWER SUPPLY	12 VDC 1A (110-240 VAC adapter included)
DIMENSIONS	W:200 L:170 H:137 mm
WEIGHT	2.2 kg (4.8 lbs)
OPERATING CONDITIONS	
OPERATING TEMPERATURE	-10 to 50 °C
STORAGE TEMPERATURE	-30 to 85 °C
OPERATING HUMIDITY	RH 10% - RH 90% (non-condensed)
STORAGE HUMIDITY	RH 10% - RH 90% (non-condensed)

- **4.3" intuitive touchscreen control**
- **Supports both infusion and withdrawal functions**
- **Adjustable flow rate during operation for flexible control**