



IPS-13RS Syringe Pump

Simultaneous Dual Channel Infusion/Withdrawal Pump with Recipe Management

The IPS-13RS combines synchronized dual-channel control with programmable recipe management. Up to 5 recipes can be stored and executed automatically for 50 repeat cycles. It's the most advanced version in the IPS-13 line, ideal for automated bidirectional processes.

SYRINGES	
CAPACITY	2 Interdependent
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 (pusher block force for 2 syringes) (44 lbs)
GENERAL SPECIFICATIONS	
RECIPE SAVE-RECALL	Yes
POWER SUPPLY	12 VDC 1A (110-240 VAC adapter included)
DIMENSIONS	W:211 L:250 H:143 mm
WEIGHT	3.2 kg (7 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" color touchscreen interface**
- **Dual synchronized infusion/withdrawal with recipe control**
- **Full automation for repeatable and precise processes**