



# IPS-13S Syringe Pump

Simultaneous Dual Channel Infusion Pump with Recipe Memory

The IPS-13S includes recipe memory for up to 5 stored programs and 50 repeat cycles. Its simultaneous dual-channel system offers synchronized and repeatable operation. Designed for efficient process automation and workflow consistency.

## 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:200 L:250 H:143 mm
WEIGHT	2.9 kg (6.3 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" touchscreen with built-in recipe memory**
- **Stores 5 recipes, supports 50 repeat cycles**
- **Automated simultaneous dual-channel operation**