

The first syringe pump designed from the ground up for laboratory animal research, with real-time pressure monitoring,  $\pm 0.5\%$  accuracy, and flow rates down to  $0.001 \mu\text{L/h}$ .

### SPECIFICATIONS

Accuracy	$\pm 0.5\%$ (excl. syringe variability)
Min flow rate	$0.001 \mu\text{L/h}$ (1 $\mu\text{L}$ syringe)
Max flow rate	120 mL/min (50 mL syringe)
Step resolution	$0.02 \mu\text{m}$
Pressure monitoring	0–20 PSI (1 mL and larger syringes)
Syringe compatibility	BD, HSW/Norm-Ject, Hamilton, custom
Dimensions	$31 \times 13 \times 6.5 \text{ cm}$
Weight	1.7 kg
Power	12 VDC 2A (adapter included) or USB-C PD3.0 battery
Operating temp	$5\text{--}40^\circ\text{C}$
Certifications	CE, UK CA, FCC, UL, CSA

### FEATURES

- ▶ Real-time pressure monitoring 0–20 PSI with configurable occlusion alarm (10, 15, 20 PSI)
- ▶ Pressure release: plunger retracts automatically on occlusion alarm
- ▶ Multiple alarms: syringe dislodged, syringe empty, syringe near-empty
- ▶ Auto-detection of syringe size and type from built-in library
- ▶ Syringe compatibility: BD plastic & glass, HSW/Norm-Ject, Hamilton, user-defined custom
- ▶ Flow rate range:  $0.001 \mu\text{L/h}$  (1  $\mu\text{L}$  syringe) to 120 mL/min (50 mL syringe)
- ▶ Step resolution:  $0.02 \mu\text{m}$
- ▶ Infusion modes: Rate + Volume, Rate + Time, Volume + Time
- ▶ Touchscreen interface with simplified operation
- ▶ Horizontal or vertical mounting; optional rack mounting for multi-pump setups
- ▶ Auto-resume after power loss (up to 12 hours)
- ▶ USB-C PD3.0 battery compatible for portable/in-cage use
- ▶ Firmware updatable via USB-A port
- ▶ CE, UK CA, FCC, UL, CSA certified

### APPLICATIONS

- ▶ Mouse and rat IV infusion (continuous and intermittent)
- ▶ Intrathecal dosing
- ▶ Microdialysis
- ▶ Glucose clamping studies (multi-pump rack configurations)
- ▶ Blood sampling combined with infusion
- ▶ Multi-channel infusion protocols