

Typical Applications

- Electrospinning

Microfluidics/Microfluidic Chips

Animal experiment

Toxicology Studies
- Capillary Electrophoresis

Drug Discovery

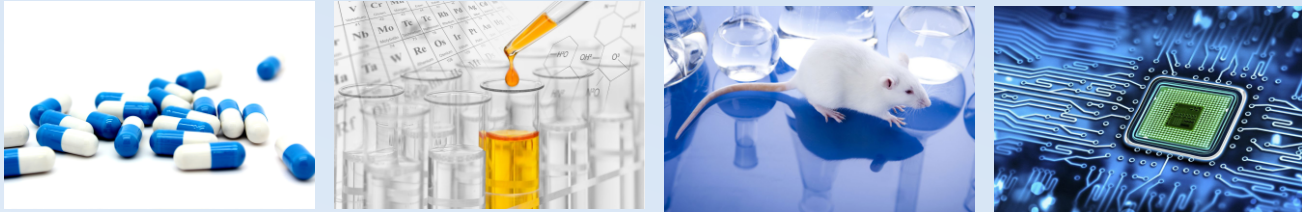
Cell Injections

Microcapsule
- Catalyzer

Neuroscience

Organic Synthesis

Nutrition science



Technical Spec

| Product Model                | ASP11-1A   | ASP11-1AP               | ASP11-2AP | ASP12-1B  | ASP12-2B |
|------------------------------|--|-------------------------|-----------|---|----------|
| Work mode                    | Single infuse, multiple infuse   |                         |           | Single infuse, multiple infuse, single withdraw, infuse/withdraw(Continuous), withdraw/infuse(Continuous) |          |
| Number of syringes           | 1  | 1                       | 2         | 1   | 2        |
| Syringe options              | 0.5μL-60mL   |                         |           | 0.5μL-150mL   |          |
| Flow rate for reference      | 3.3pL/min-120.0mL/min  | 0.9pL/min-29.5mL/min    |           | 3.3pL/min-226.0mL/min   |          |
| Stroke                       | 110mm  |                         |           | 140mm   |          |
| Pusher advance per microstep | 0.0326μm/microstep   | 0.0088μm/microstep      |           | 0.0326μm/microstep  |          |
| Linear speed                 | 0.416μm/min-180mm/min  | 0.1126μm/min-35.4mm/min |           | 0.416μm/min-180mm/min   |          |
| Linear travel accuracy       | ≤ ±0.35% (When travel ≥30% of stroke)  |                         |           |   |          |
| Linear force (Max.)          | 320N(Can be set 20%-100%)  |                         |           |   |          |
| Parameter method             | 20 parameter methods can be stored and easily recalled   |                         |           |   |          |
| Control mode                 | Touchscreen control, External control, Communication control, Footswitch control, Labview control  |                         |           |   |          |
| External control             | Two control inputs: switch signals or level signals for start/stop and emergency stop<br>Two status outputs: can be configured as start/stop, direction or fault alarm |                         |           |   |          |
| Communication control        | RS485, Modbus RTU or Longer OEM protocol   |                         |           |   |          |
| Dimensions (L×W×H)           | 240mm×180mm×137mm  |                         |           | 280mm×212mm×160mm   |          |
| Power supply                 | AC 90V-260V/15W  | AC 90V-260V/10W         |           | AC 90V-260V/20W   |          |
| Operating temperature        | 0 - 40℃  |                         |           |   |          |
| Relative humidity            | ≤ 80%RH, no condensation   |                         |           |   |          |
| Weight                       | 2.8kg  | 2.9kg                   | 2.85kg    | 3.65kg  | 3.65kg   |

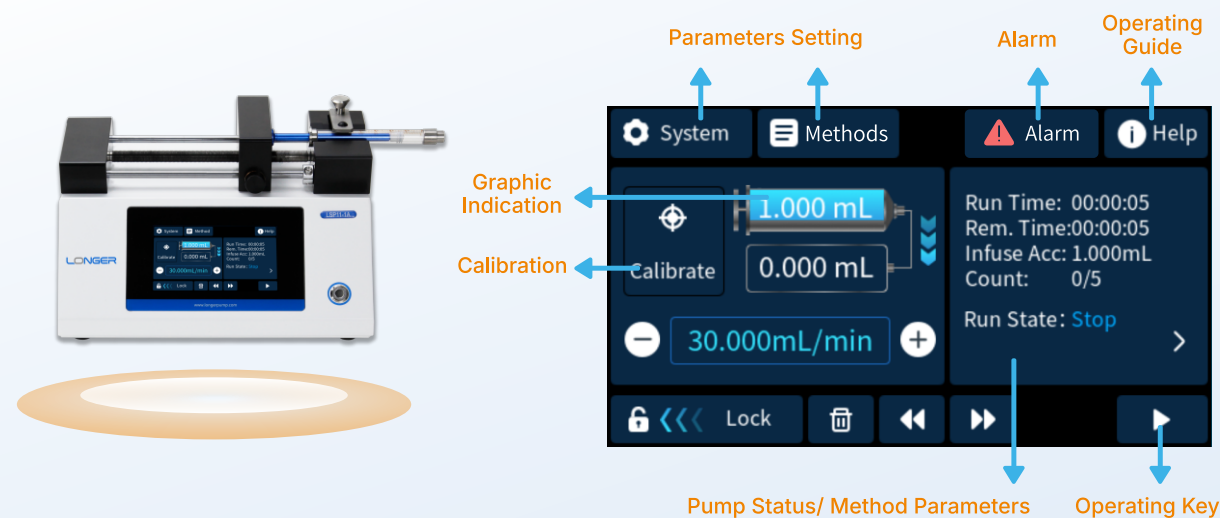
LONGER  
A Halma company



ASP100 Series Digital Syringe Pump

- Experience unmatched ease of use with a high-resolution color LCD and an intuitive full-touchscreen interface.
- Delivering liquids with exceptional accuracy and a pulseless flow, perfect for handling small volumes.
- Fine-tune the flow rate in real time, optimizing the pump parameters even while in operation.
- Provided with ready-to-use Labview drivers and demos for streamlined automation and effortless integration with other lab equipment.

## 01 High-resolution LCD touchscreen, easy-to-use.



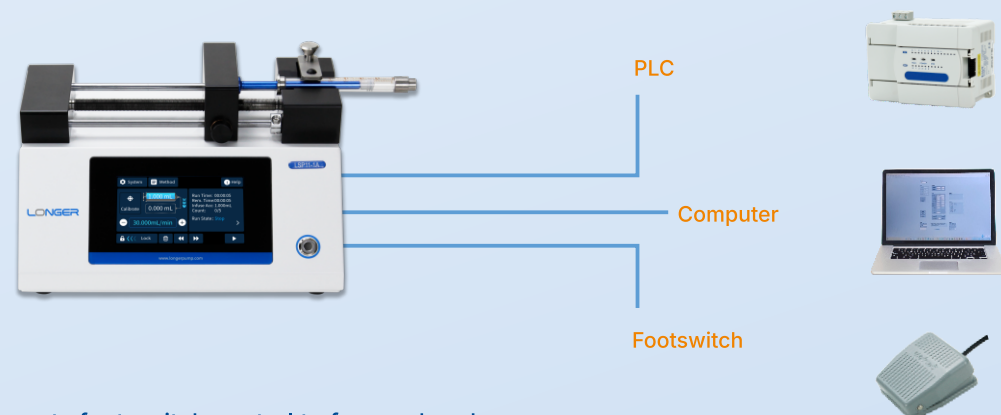
- ▶ Intuitive graphic interface for fantastic interactive experiences.
- ▶ Visual display of various pump status, alarms, operating guides for quickly configuration and operation.

## 02 Small size, big linear force, can securely hold 0.5uL to 150mL syringes.

- ▶ Adjustable linear force up to 320N ensures the optimal force is applied for different syringe sizes.
- ▶ The sturdy and easy-to-use syringe holder can accommodate syringes up to 150mL (Depending on pump model).

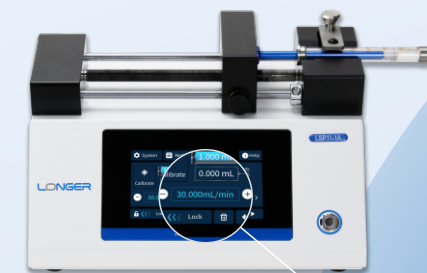


## 03 Pump can be controlled via external signals or communication commands for easy system setup.



- ▶ Supports foot switch control to free up hands.
- ▶ External signal control function enables other controllers to start and stop the pump.
- ▶ Communication control function enables other controllers to configure parameters and operate the pump via communication commands.

## 04 The ASP100 series can be placed on its side to reduce the footprint by 50%, perfect for limited bench space.



Vertical Orientation Display Rotates 90°  
Save 50% footprint

## 05

The flow rate can be adjusted while the pump is running, optimizing the parameters in real-time and reducing the cost.

The flow rate can be set or fine-tuned while the pump is running.



The beep sound, indicator light and text prompts support the users through the operation process.

## 06



Green-Running



Blue-Standby



Red-Warning

- ▶ Beep sound can indicate keypad clicks, nearing completion of work, work completion, and fault alarm.
- ▶ Light indicates the power-on, standby, running, warning status.
- ▶ Text prompts indicate the pump status and guide the operating procedure.