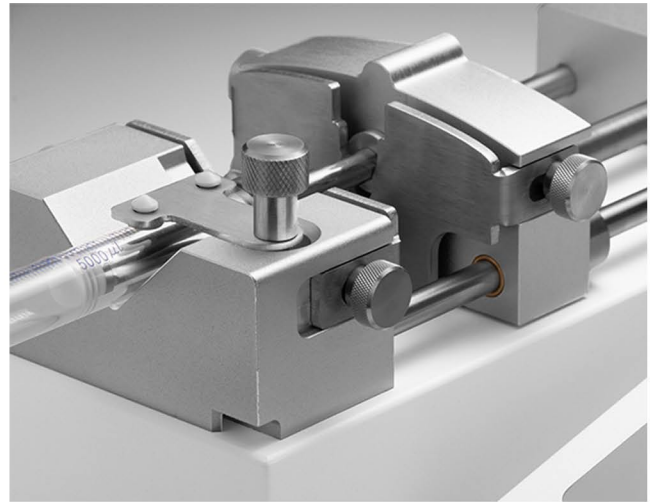


## Split Type Syringe Pump SPM



### Introduction

4.3 inch touch screen control, compact design. Display 8 pump units working parameters and working state in same screen. Friendly interface, easy operation. Split design, mainly for laboratory.

### Features

1. Each unit working independently, can set one or some units freely. Each unit can infuse or withdraw different volume in same time or different time.
2. Intelligent calibration, ensure infuse volume accuracy. Online micro adjusting function, convenient to adjust the volume of one units, decrease volume error.
3. Real time monitor, animate display monitor result. Controller can receive traffic alarm of each unit.
4. Back distance setting, can exclude bubbles inside syringe, improve volume accuracy.
5. Fast forward and backward function used for loading syringe, washing and unlock traffic protection.

### Interface Display

The interface display includes the following elements:

- Real-time display flow rate:** Shows 7.50 mL/min.
- Display area for setting parameter:** Shows date and time (2018/01/01 10:00 AM) and syringe details (Unit: Unit1, Model: Withdrawal, Manufacturer: Medical Syringe, Size: 1.0 mL, ID: 4.7 mm).
- Display area for dynamic working:** Shows four syringe icons with status indicators (stop, run, pause, fast forward) and a progress bar.
- Function setting area changeable by touching:** Includes icons for Unit, MODE, and Setting.

## Technical Specifications

Working mode(Five)	Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion
Pump unit	1-8 optional
Syringe size	Plastic syringe: 1mL-50mL; Glass syringe: 0.5μL-50mL .
Syringe selection	Available of the mainly manufacturer, type and syringe from, also can define syringe ID in same time
Linear speed range	1μm/min-132mm/min(Flow rate=Linear speed* syringe inner cut area)
Min. linear rate	1μm/min
Linear force	≥16Kgf
Max. stroke	90mm
Stoke resolution	0.078μm/μstep
Accuracy	Stroke≥30% maximum stroke,Error≤ ±0.5%
Back distance	0.01-5mm
Working mode	Independent working mode
Stored modes	Can save 10 group working modes
Display	Industrial grade 4.3" LCD color display
Control method	Touch screen and Mechanical keypad
Power-off memory	Display the previous data parameter after power on again
Output	OC gate signal output,used to indicate running status and direction
External control signal	Start/stop signal,active switch signal:(5-24V)
Communication interface	RS232/RS485, Modbus protocol(RTU mode)
Controller Power supply	DC5V/10W
Pump unit power supply	DC24V/24W
Condition temperature	0-40°C
Relative humidity	<80%
IP rate	IP31
Controller dimension	160×150×95 (mm)
Controller weight	1kg
Pump unit dimension	257×110×131 (mm)
Pump unit weight	2.6kg

**Dimension Drawing (Unit:mm)**

