SYRINGE PUMP

SOLAR PHYSICS – SP-300



DUAL-CHANNEL HIGH-PRECISION MICROFLUIDIC SYRINGE PUMP

High-Precision Laboratory Fluid Transfer Systems

OVERVIEW

Designed with advanced microprocessor control, a high-resolution touchscreen, and an intuitive user interface, the Dual-Channel High-Precision Syringe Pump offers superior flow accuracy for scientific research and critical laboratory applications. Its dual-channel architecture enables synchronized and continuous fluid transfer with two syringes simultaneously.

KEY FEATURES

- **Dual-Channel Synchronous Operation:** Independent or synchronized high-precision flow control with 2 syringes simultaneously.
- **Smart User Interface:** Intuitive usage powered by a 5-inch color touchscreen and 5 quick-access function keys.
- **Versatile Operating Modes:** Multiple mode selections including Infuse, Withdraw, Infuse/Withdraw, Withdraw/Infuse, and Continuous.
- **Broad Syringe Compatibility:** Ability to identify and utilize syringes from 10 µL to 60 mL across various brands, materials, and inner diameters.
- **Safety & Data Protection:** Power-off memory to save operational data during electrical outages, overload/occlusion alarm, screen lock, and mute functions.
- **Quick Response & Flexibility:** On-screen Start/Stop controls and single-touch fast forward/reverse buttons.

TECHNICAL SPECIFICATIONS

Feature	Value / Description
Number of Channels	Single or Dual Channel
Control System	Microprocessor Controlled, Digital
Display & Keypad	5-inch Touchscreen
Operating Modes	Infuse, Withdraw, Infuse/Withdraw, Withdraw/Infuse, Continuous
Syringe Volume Range	10 µL – 60 mL or higher

Feature	Value / Description
Flow Rate Range	0.185 nL/min – 83.113 mL/min
Linear Accuracy / Step	Minimum 0.150 µm advance per microstep
Communication / Interface	USB / RS-485 Communication Port
On-Screen Parameters	Syringe Name, Diameter/Size, Operating Mode, Flow Rate/Volume, Real-Time Status

APPLICATIONS

- Electrospinning and Microfluidic Studies
- Biomedical and Pharmaceutical R&D Research
- Chromatography and Spectroscopy Sample Preparation
- High-Precision Reagent Addition and Chemical Dosing

DELIVERY & WARRANTY

- **User Manual:** Includes a comprehensive Turkish/English user manual as standard with the device.
- **Warranty:** Covered by a full 2-YEAR warranty against manufacturing and assembly defects.
- **Authorized Dealer Guarantee:** Sold under the guarantee of our company holding an authorized dealer certificate, backed by post-sale technical support services.