



WORLD
PRECISION
INSTRUMENTS
Instrumenting scientific ideas

Dual Rate Syringe Pump

SPLG-G88PLUS

The intuitive **SPLG-G88PLUS** graphical user interface controlled with a large 7" LCD color touch screen display allows quick and easy setup. The display run screen presents the user with all key dispensing parameters in real time. Syringe tables containing all major syringe manufacturers allow simple selection of any compatible syringe size. Audible Alarms, Adjustable Force and Screen Lock are all features that are available with a touch of the screen.

The **SPLG-G88PLUS** Dual Rate Syringe Pump opens a whole new set of pumping possibilities. Three operating conditions named **Independent**, **Reciprocating** and **Twin** are available as standard features to satisfy various applications in life science. All three conditions come with the **SPLG-G88PLUS**. No additional upgrades are required.



Features

- TTL, USB & RS-232 Communication
- Compatible with a wide variety of syringes
- Large touch screen display allows quick and easy setup

Benefits

- Two separate syringe pumps in one instrument
- High or low-pressure operation
- Continuous fluid delivery

Applications

- Continuous injection for long-term toxicology testing
- The injection of dyes, perfumes and flavoring in industrial applications
- Applications with liquids or viscous materials in micro-manufacturing
- Continuous injections of reactants into reactor vessels
- Simultaneous samplings from two sites

Connectivity & Communication

SPLG-G88PLUS comes standard with USB and RS-232 for PC communication and RS-485 for pump-to-pump communication. An entire suite of ASCII commands is available to control the pump remotely with a PC. The pump contains a footswitch input and digital input/output for each independent pumping channel.



Dual Rate Syringe Pump

SPLG-G88PLUS

Independent Condition

Independent Condition allows the **SPLG-G88PLUS** to operate as two separate syringe pumps named P1 and P2. Each syringe will operate independently with different syringe types, sizes, force, or target (volume or time, mode dependent).

Reciprocating Condition

In Reciprocating Condition, both syringe channels move in opposite directions at the same rate using the same syringe size and type. When combined with a valve box, the Reciprocating Condition can provide the continuous fluidic delivery or a peristaltic pump with the accurate, pulseless, low flow rates provided by a syringe pump.

Twin Condition

Twin Condition allows both syringes to operate in the same mode using the exact same syringe type, syringe size, force, target (volume or time) and flow rate settings. The pump also allows the user to combine both flows for higher speed and volume infusion applications

SPECIFICATIONS

TYPE	Microprocessor dual rate infuse/withdraw/continuous syringe pump
ACCURACY	±0.25%
REPRODUCIBILITY	±0.05%
SYRINGE TYPE	Glass, plastic and stainless steel
SYRINGE SIZE MINIMUM	0.5 µl (0.103 mm minimum inner diameter)
SYRINGE SIZE MAXIMUM	60 ml (32.573 mm maximum inner diameter)
FLOW RATE MINIMUM	1.02 pl/min (0.5 µl syringe, 0.103 mm inner diameter)
FLOW RATE MAXIMUM	106 ml/min (60 ml syringe, 32.573 mm diameter)
FLOW RATE DISPLAY	7" color display with touchscreen
CONNECTORS	USB - Type B RS-232 - 9-pin D-Sub connector RS-485 - IEEE-1394, 6 pos for pump-pump communication TTL Input/Output - Two 15-pin D-sub connectors, one for reach pump mechanism Footswitch - Two phonojack inputs, one for each pump mechanism
AVERAGE LINEAR FORCE	70 lb (31.75 kg) at 100% force setting up to a flow rate of 90 ml/min using up to a 60 ml syringe with a 32.573 mm inner diameter. 50 lb (22.6 kg) at 100% Force Setting for flow rates 90 ml/min to 106 ml/min using the same size syringe.
POWER SUPPLY	Input 100-240 VAC, 50-60 Hz, Output 30 V 1.66A 50 Watt
WEIGHT	21 lb (9.09 kg)
DIMENSIONS	(L x D x H) 11" x 15" x 8" (28 cm x 39 cm x 21 cm)
CLASSIFICATION	Class I
POLLUTION	Degree 1
INSTALLATION	Category II
REGULATORY CERTIFICATIONS	CE, ETL (UL & CSA), CB Scheme, EU RoHS, WEEE

WORLD PRECISION INSTRUMENTS

USA: International Trade Center, 175 Sarasota Center Boulevard, Sarasota FL 34240-9258 USA
Tel: (941) 371-1003 • **Fax:** (941) 377-5428 • **E-mail:** wpi@wpiinc.com • **Internet:** www.wpiinc.com

UK: 1 Hunting Gate, Hitchin, Hertfordshire SG4 0TJ England • Tel: 44 (0)1462 424700 • E-mail: wpiuk@wpi-europe.com

Germany: Saarstraße 23, D-61169 Friedberg (Hesson) • Tel: +49 (0)6031 1602171 • Fax: +49 (0)6031 1602180 • E-mail: wpide@wpi-europe.com

China & Hong Kong: Rm 25e, No8 Dongfang Rd., Pudong District, Shanghai 200120 PRC • Tel: +86 688 85517 • E-mail: ChinaSales@china.wpiinc.com

Brazil: Conselheiro Nabias, 756 sala2611, Santos-São Paulo 11045-002 Brazil • E-mail: info@brazil.wpiinc.com