

# PDS 100 Programmable Dispensing System

**Valveless, Programmable,  
Dispensing & Metering**

**NEW!**

*The Ultimate in Programmable  
Laboratory, Process, and  
Production Dispensing*

## Features:

- All models feature FMI's Patented CeramPump® No-Valve Fluid Control
- Pump heads are integrally mounted to control unit, which includes precision stepper motors, drivers and programmable electronics in a rugged anodized aluminum enclosure.
- Intuitive menu driven programming uses front panel membrane switches with 2.75" x 1.5" LED display.
- Available in single and dual pump head configurations in all FMI pump head sizes.
- Dual pump head configurations can be programmed for independent pump control, as well as synchronized pulse-free fluid metering.
- RS485, 4-20mA, 0-10V, 0-5V interface for connection to process sensors, PLC and PC controllers



*Shown above with  
dual RH pump heads.*



**FLUID METERING, INC.**

Call us at 516-922-6050 or use our convenient online application form on our web site: [www.fluidmetering.com](http://www.fluidmetering.com)

## General Description

The **PDS-100** is a Programmable Dispensing System which uses precision stepper motors to control FMI "Q" and "RH" pump models including STQP, STQ, STH, & STRH in all piston sizes. The FMI pumps are integrally mounted to the programmable controller.

The controller contains the stepper motors and driver electronics, and is a rugged anodized aluminum design. Several single and dual pump configurations are available including a dual pump configuration for "pulseless" *Smooth-flow* (see below) metering. Programming is menu driven and accomplished using convenient front panel membrane switches.

## Features

- FMI's Patented CeramPump® valveless piston pump design
- Intuitive programming of several dispense and continuous metering modes using convenient front panel membrane switches and LED menu display.
- Available in Single and Dual Channel Configurations in all piston sizes
- Dual pump head configurations can be programmed for either independent pump control or synchronized control for pulseless continuous metering
- RS485, 4-20mA, 0-10V, 0-5V Control Input capability

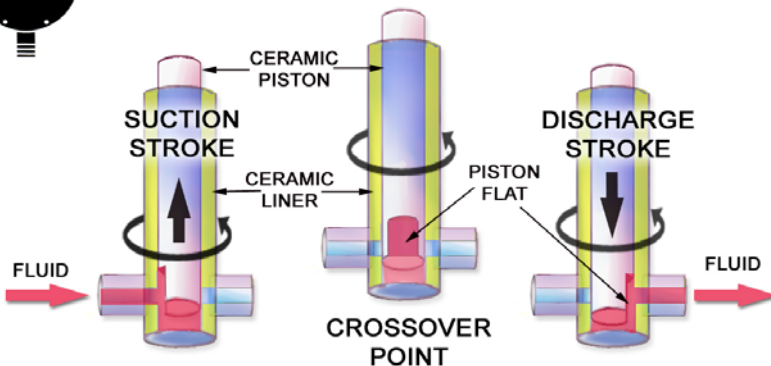
The *Smooth-flow* is a special configuration of the **PDS-100** dispensing system which utilizes dual FMI pumps precisely synchronized, to eliminate pulsation.

Each pump head is factory calibrated to meet the flow range required for the application. The outlet ports of each pump are connected together using a "y" or "t" fitting. The result is a pulse-free fluid stream. The pulseless flow rate can be varied by simultaneously controlling the RPM of the dual stepper motors. The RPM can be varied using the front panel key pad, or via the RS485, 4-20mA, 0-10V, or 0-5V control input

## The *Smooth-flow* features

- **Pulse-Free Fluid Delivery down to 5 uL/min continuous flow**
- **1% Accuracy or Better for Millions of Cycles**
- **Precision Dual Stepper Control**
- **Factory calibrated for your flow range**
- **Large 2.75" x 1.5" LED menu display**

## CeramPump® Valveless Metering



### Our Unique Valveless Design

The valveless pumping/dispensing function is accomplished by the synchronous rotation and reciprocation of the ceramic piston in the precisely mated liner. One complete revolution is required for each suction/discharge cycle.

## Need Application Assistance???

Call Us at 1-516-922-6050 or visit our convenient Application Questionnaire on the web @ [www.fmipump.com](http://www.fmipump.com).