

## Feature

### Introduction

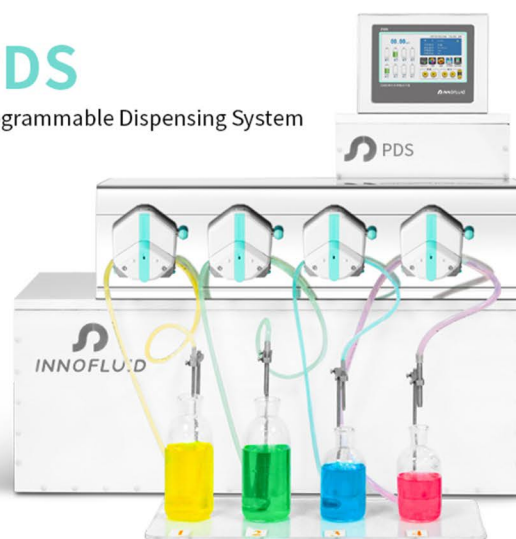
One controller can control maximum 8 pump units.  
 Each pump unit with same or different pump head.  
 The OCM controller and pump unit can be integrated type or split type.

### Four working modes

Independent working mode: PDSII  
 Independent working mode and steps filling mode: PDSIII  
 Logic working mode: PDSI  
 Comprehensive working mode: PDSIV

## PDS

Programmable Dispensing System



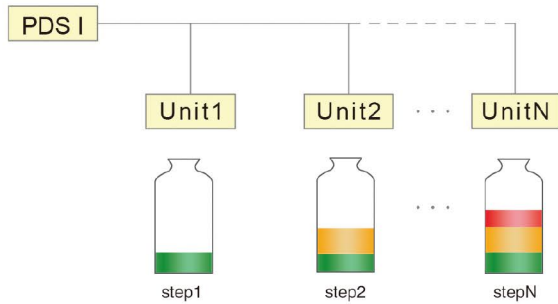
## Suitable pump head

MC series, MiniPump, UD15, Handypump, YZ1515x, YZ2515x, DZ25-3L, DZ25-6L, DY15, DY25, YZ35

## Technical Specification

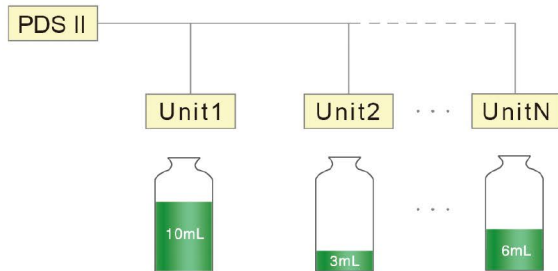
Speed range	0.1~600rpm, also depend on pump head
Speed resolution	0.01rpm
Back suction angle	0-360°
Display	7 inch- industrial grade- true color LCD TFT screen
Control	Touch screen
Start/stop, direction signal	Active switch signal 5V
Power supply	AC10-240V
Power consumption	15W
Controller dimension	240*221*111mm
Controller weight	2.1kg
Memory function	Keep the data parameters before power off after power on again
IP rate	IP31
Pump housing material	Mirror stainless steel

## Four working modes



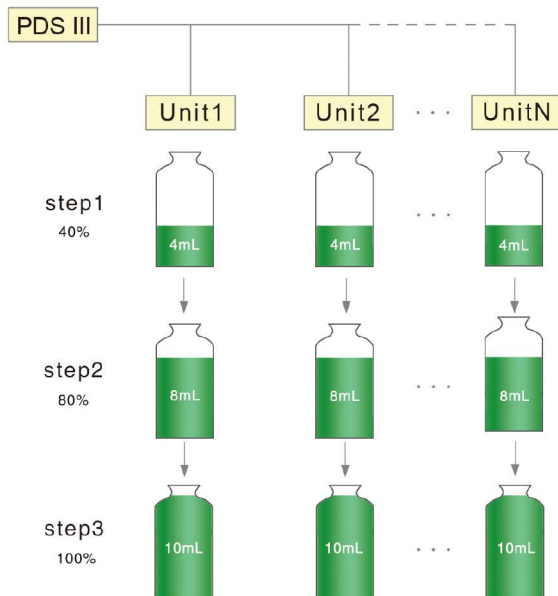
### Logic working mode

In logic working mode, each unit working cooperatively. Filling or transferring with orders, also with different proportion adding, finish automation mixing work.  
 Maximum steps: 50 steps  
 Common mode: Can save maximum 5 groups data.  
 Working time: 0.1sec ~9999hour  
 Pause time: 0.1sec ~9999 hour  
 Steps trigger way: Time trigger or external trigger.  
 Calibration: Can calibrate each step separately, online micro adjusting function.



### Independent working mode

In independent working mode, each unit working independently, can fill different volume.  
 Working mode: transferring or dispensing  
 Common mode: In dispensing mode can save 5 groups data.  
 Calibration: Each pump unit can calibrate separately, online micro adjusting function.  
 Dispensing time: 0.1-9999sec  
 Pause time: 0.1-9999sec  
 Repeat number: 1-9999 times, set '0' for unlimited times  
 Communication: RS232/RS485, Modbus protocol (RTU mode)



### Independent and steps filling working mode

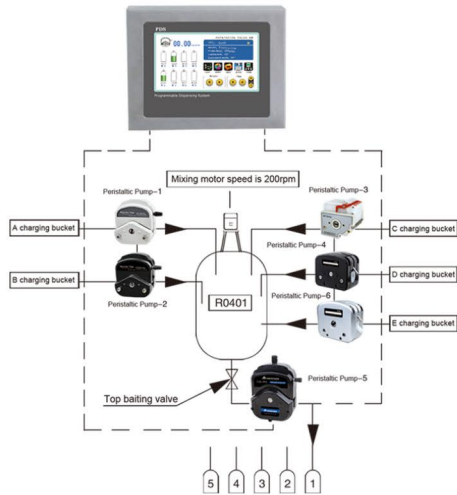
In independent working mode, each unit can finish filling process with multiple different filling volume. This function suitable for prevent fluid splashing and foaming. This process can also repeat many times, achieving complicated dispensing function.  
 Working mode: Transferring and dispensing mode  
 Transferring total volume: Can record the total liquid volume transferred by each unit in transfer mode.  
 Dispensing step: It can be dispensed in three steps, and different parameters can be set for each step.  
 Calibration: Can calibrate each step separately, online micro adjusting function.  
 Common mode: In dispensing mode can save 5 groups data.  
 Dispensing time: 0.1-9999.99sec  
 Pause time: 0.1-9999.99 sec  
 Repeat number: 1-9999times, set '0' for unlimited times.  
 Communication: RS232/RS485, Modbus protocol (RTU mode)

### PDS IV

### comprehensive working mode

Working mode: Include logic working mode, independent working mode, independent and steps filling mode.

## Application



**Application 1** Chemical industry: Reactor liquid adding, dispensing and washing, with different volume and adding liquid according to preset order.



**Application 2:** PDSIV, one controller with 7 pump units, 4 minipump and 3 YZ1515x pump heads, for different liquid filling with different time sequence.



**Application 3** Medical industry: automatic liquid mixing system, intelligent proportional mixing of different liquids, the system can intelligently detect the liquid level of the barrel. Through the analysis of the liquid state of each barrel, control the start and stop of the peristaltic pump, open and close OF solenoid valve, so as to realize the automation of the work flow.



**Application 4** Bio-pharmaceutical: Work with reactor or fermentation tank, the OCM system add different liquids with proportion and order into reactor. Together accomplish adding liquid, mixing, reaction, dispensing, waste discharge and washing function.

## Application



**Application 5** Research laboratory:  
Customized OCM system, one controller with different pump heads and one pneumatic pump, with foot pedal switch control the pump start/stop.