

## Automated Mobile Phase Preparation System



### Product Introduction

This series of products is specifically designed for the automated preparation of mobile phases required for high performance liquid chromatography (HPLC) and liquid chromatography-mass spectrometry (LC-MS) instruments.

The system enables seamless automation of the whole process, from feeding solid and liquid raw materials, to mixing for dissolution, precise pH adjustment, filtering out impurities, dispensing into mobile phase bottles, and ultrasonic degassing to remove gases dissolved in solvents. Finally, it labels the prepared mobile phase for identification and management. The whole process is automated without the need for human intervention.

### Product Features



#### Automation

Enables whole process automation of mobile phase preparation, ensuring seamless integration from raw material feeding to finished product output



#### Modularity

The mobile phase preparation throughput can be selected within the range of 50-200L/day based on actual needs, with functional modules configured as required



#### Ease of use

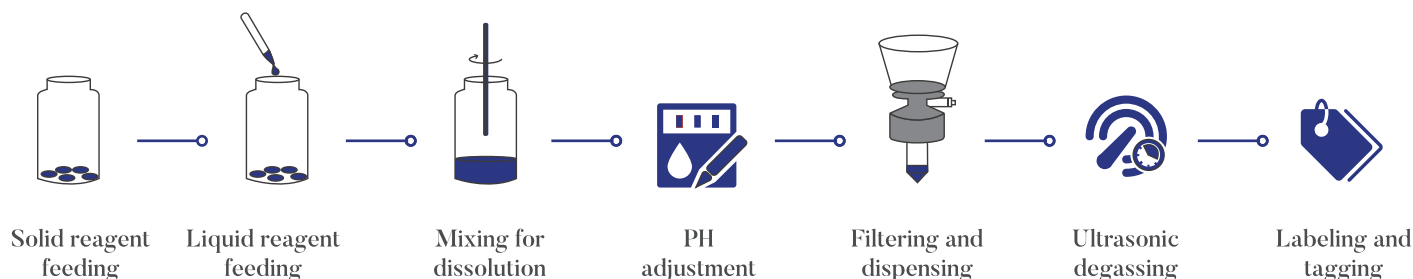
Supports formulation design and features an automatic low inventory alarm function for reagent and consumables, enhancing operational convenience and efficiency



#### Compliance

The system strictly adheres to GMP and FDA 21 CFR Part 11 requirements, ensuring the compliance of the production process and the quality of the product

## Mobile Phase Preparation Process



## Product Series

|                                 |                                        | Premier                       | Professional                  | Compact           |
|---------------------------------|----------------------------------------|-------------------------------|-------------------------------|-------------------|
| Product Configurations          | Functional Modules                     |                               |                               |                   |
|                                 | Solid feeding                          | ✓                             | ✓                             |                   |
|                                 | Liquid feeding                         | ✓                             | ✓                             | ✓                 |
|                                 | pH adjustment                          | ✓                             | ✓                             | ✓                 |
|                                 | Mixing method                          | Paddles                       | Paddles                       | Paddles/Magnets   |
|                                 | Filtering and dispensing               | ✓                             | ✓                             |                   |
|                                 | Ultrasonic degassing                   | ✓                             | ✓                             |                   |
|                                 | Labeling/Tagging                       | ✓                             | ✓                             |                   |
| Preparation Speed               |                                        | 200 L/day                     | 100 L/day                     | 50 L/day          |
| Additional Functions            | Automated pH meter calibration process | ✓                             | ✓                             | ✓                 |
|                                 | Automated balance calibration process  | ✓                             | ✓                             |                   |
| Dimensions                      |                                        | 5 m*2 m*2.1 m                 | 4 m*2 m*2.1 m                 | 1 m*1 m*1.2 m     |
| Raw reagent inventory           |                                        | 15 types                      | 12 types                      | 8 types           |
| Raw powder inventory            |                                        | 9 types                       | 9 types                       |                   |
| Mobile phase preparation volume |                                        | 1 L/2 L/5 L                   | 1 L/2 L/5 L                   | 1L/2L             |
| Powder dispensing precision     |                                        | ≤1% (based on feeding volume) | ≤1% (based on feeding volume) |                   |
| Reagent dispensing precision    |                                        |                               | ≤1 %                          |                   |
| pH adjustment range             |                                        |                               | 0~14                          |                   |
| pH testing precision            |                                        |                               | 0.01 pH                       |                   |
| Weighing precision              |                                        | 1/10,000                      | 1/10,000                      |                   |
| Compliance                      |                                        | GMP/FDA21 CFR Part 11         |                               |                   |
| Power supply                    |                                        | 220 V/50 Hz; 10 kW            | 220 V/50 Hz; 8 kW             | 220 V/50 Hz; 2 kW |

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### Declaration

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