

Galatek

Integrated Mobile Phase Preparation System



PRODUCT INTRODUCTION

The Integrated Mobile Phase Preparation System 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

Mobile phase preparation throughput can be configured to output requirements, such as 10 × 4 L bottles per 8-hour shift, with functional modules configured as required



Smart Operations

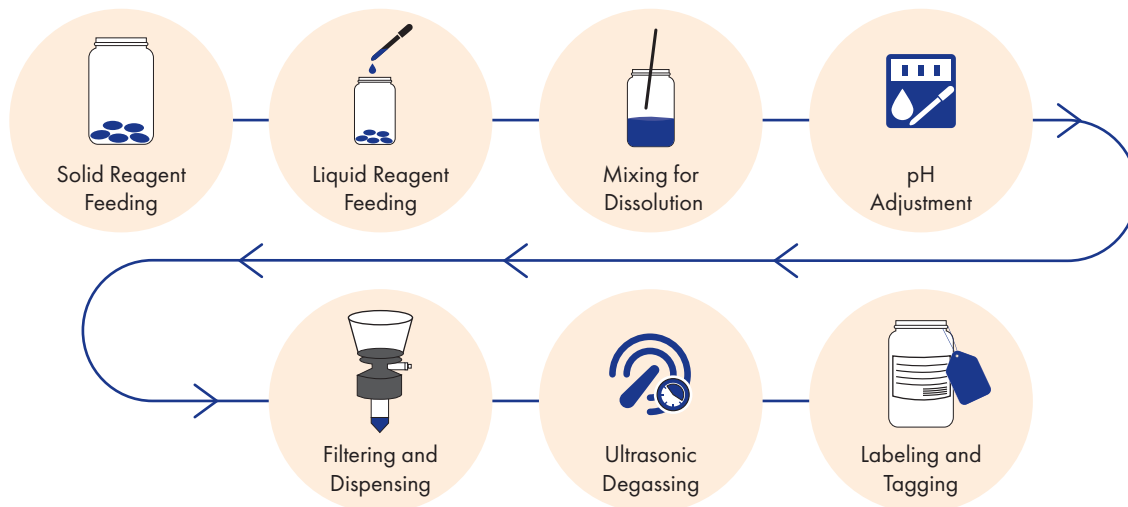
Supports formulation design and features an automatic low inventory alarm function for reagent and consumables, enhancing operational convenience and efficiency



Compliance

Adheres to GMP and FDA 21 CFR Part 11 requirements, with built-in daily inspection processes, including balance and pH checks, to support audit tracking

MOBILE PHASE PREPARATION PROCESS



PRODUCT SERIES

Professional

Product Configurations

Functional Modules	Solid Feeding	✓
	Liquid Feeding	✓
	Mixing for Dissolution	✓
	pH Adjustment	✓
	Filtering & Dispensing	✓
	Ultrasonic Degassing	✓
	Labeling & Tagging	✓
Preparation Throughput		120 L (Based on a 24-hour day)
Additional Functions	Automated pH Meter Calibration Process	✓
	Automated Balance Calibration Process	✓

Product Parameters

Dimensions	3.7m x 2.0m x 2.1m (L x W x H) with nitrogen cabinet
Raw Reagent Inventory	17 Types
Raw Powder Inventory	9–11 Types (with vs without nitrogen cabinet)
Mobile Phase Preparation Volumes	1L / 2L / 4L
Powder Dispensing Precision	1g: ±10%; 100g: ±5% (based on NaCl)
Reagent Dispensing Precision	<1L: ±1%; 1–5L: ±0.5%
pH Adjustment Range	0~14
pH Testing Precision	±0.05
Weighing Precision	0.0001g
Compliance	GMP/FDA 21 CFR Part 11
Power Supply	380V/50Hz; 10kW