



SepaBean™ machine L

The ultimate solution for large-scale purification, offering seamless scalability, enhanced safety, and high efficiency, with an optional pump for efficient large-sample handling.



Simplify your purification, maximize your efficiency!

Santai Science Inc.

SepaBean™ machine L

Simplify your purification, maximize your efficiency!

Product Overview

The SepaBean™ machine L is an advanced system designed for large-scale purification with a high flow rate of up to 1,000 mL/min, providing effortless scalability and user-friendly operation. It allows seamless transitions from lab-scale experiments to pilot-scale production. The anti-static design ensures enhanced safety and reliability, while the optional sample loading module increases productivity by efficiently handling large sample volumes.

Key Features

- Higher Flow Rate and Loading Capacity**
 High flow rate (1,000 mL/min) model designed to handle high-volume samples of up to 1 kg in a single run.
- Wireless Control and Operation**
 Allows remote control via mobile devices, ideal for light-sensitive or isolated experiments.
- Easy Flash Method Development**
 Optimizes and transfers separation conditions from HPLC and TLC for efficient, scalable purification.
- Optional ELSD Detector**
 Optional ELSD expands detection capabilities to cover a wider range of sample types, including non-UV-active compounds.

Equipment Specifications

Characteristics	Specifications
User Interface	4.3 inches screen (≈ 10 cm)
Control Device	Wireless operation through iPad®
Flow Rate Range	50 - 1,000 mL/min
Maximum Pressure	<ul style="list-style-type: none"> Model 1000LP: 150 psi (10.3 bar) Model 1000MP: 1,450 psi (99.9 bar)
Detectors	<ul style="list-style-type: none"> DAD 200 - 400 nm UV Detector DAD 200 - 800 nm UV/Vis Detector ELSD Universal Detector (optional)
Spectral Display	Single, dual, or all-wavelengths
Pumping System	High accuracy dual-piston pump
Number of Solvents	Four (4) solvents binary with any combinations of two (2) solvents
Gradient Types	Isocratic, linear, and step gradients
Column Sizes	800 g - 10 kg
Sample Loading Capacity	8 g - 1 kg



Optional Sample Loading Module and Fraction Collector



Main Characteristics



Dual-Piston Pump



Four Solvent Lines



Maximum Flow Rate (mL/min)



Pressure Resistance (psi)

Characteristics	Specifications
Certification	CE
21-CFR Part 11 Compliance	The control software meets FDA requirements for system safety
Fraction Collection	All, waste, threshold, slope, or time
Fraction Collector	Optional collection module, with 8 collection channels
Safety Configuration	Intelligent pressure alarm
Sample Injection	Optional sample loading pump module, 100 and 200 mL/min options available
Column Holder	Suitable for 800 g to 3 kg flash columns, additional column holder for 5 and 10 kg column (optional)
Dimensions (W x D x H)	33 x 57 x 56 cm (13.0 x 22.4 x 22.0 in)
Weight	40 kg (88 lbs)



Sample Loading Module

The optional sample loading module for SepaBean™ L streamlines sample introduction with adjustable flow rates and loading times, enhancing efficiency. It supports various sample types and volumes, ensuring precise and consistent loading for optimal purification performance.



Large Size Column Holder

The optional column holder for SepaBean™ L is designed to accommodate up to 10 kg flash columns, featuring interchangeable top plate holders installed on the equipment's sides. Each plate is engraved with size markings on the facade for easy identification, providing secure and flexible support for different column sizes during large-scale purifications.



Ordering Information

Item Number	Description
SepaBean™ machine L 1000LP	
SPBL01501000-0	With fixed wavelength (254 nm) DAD UV detector
SPBL01501000-1	With 200 - 400 nm DAD UV detector
SPBL01501000-2	With 200 - 800 nm DAD UV/Vis detector
SepaBean™ machine L 1000MP	
SPBL14501000-0	With fixed wavelength (254 nm) DAD UV detector
SPBL14501000-1	With 200 - 400 nm DAD UV detector
SPBL14501000-2	With 200 - 800 nm DAD UV/Vis detector

Fraction Collector

The optional fraction collector for SepaBean™ L is equipped with 8 built-in collection channels, designed to enhance workflow efficiency. With its precise and flexible design, it integrates seamlessly with the system, ensuring accurate fraction collection and reliable performance for various purification needs.



Cartridges Compatibility

The SepaBean™ machine L is compatible with SepaFlash™ cartridges ranging from 800 g to 10 kg, without requiring adaptors. Cartridges are available with various adsorbents, including irregular & spherical silica (bare and bonded phases like C18, NH₂, etc.), providing versatile application options.

Note: Please note that columns shown below are not at scale.



Item Number	Description
Optional Accessories	
MCH-VL1-0035	Manual column holder suitable for 800 g, 1.6 kg, and 3 kg flash column, built-in valves and pipelines of sample load pump and solid sample load
SH-1	Manual column holder for 800 g up to 10 kg flash column
PL100-VL1-0037	Sample-loading module with adjustable flow rate and loading time. Maximum loading velocity is 100 mL/min
PL200-VL1-0038	Sample-loading module with adjustable flow rate and loading time. Maximum loading velocity is 200 mL/min
FC-VL1-0039	Fraction collector, built-in 8 collection channels



SepaBean™ Family

machine U

(entry-level)



machine T

(best-seller)



machine

(standard version)



machine 2

(medium pressure)



machine L

(scale-up)



SepaFlash™ Columns

Standard Series



Large Size Series



HP, Bio & Bonded Series



iLOK™ Series

(empty & pre-packed)



iLOK™ - SL Series

(Solid-load cartridges)



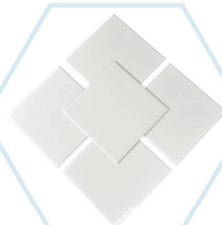
Ultra-Pure Bare Silica Gels



Ultra-Pure Bonded Silica Gels



TLC Plates



Other SepaFlash™ Products



Santai Science Inc.

214 Brunswick, Pointe-Claire
Quebec, H9R 1A6, Canada



+1 514 505 1378



support@santaisci.com



www.santaisci.com

Follow us on



© Santai Science Inc.
PDS-SPBL, v1.0, 11/24