

Gradient Optimization reduces solvent consumption up to 60%.

Built-in sample load pump.

Direct scale-up from milligrams to >150 g.

Utilizes cartridges from 50 to 1500 g.

Removable fraction collection racks and trays.

Leak detector adds safety.



Isolera™ Spektra LS (Large Scale)

From Research to Development and Scale Up, Purify up to 150 g in One Step

Isolera™ LS is a fully automated development scale flash purification system that dramatically reduces large scale purification times. Simply select or create a method, load your sample and purify – it's that easy.

Isolera™ Spektra LS is a large scale flash chromatography system with a standard fraction capacity of up to 9.6 L. For additional fraction capacity (up to 320 L) a funnel rack kit is available. The funnel rack kit comes with two racks (16 funnels each) a cart with wheels that holds the system, collection vessels, and a leak detector for truly large scale and professional use.

Advanced features include the solvent-saving Gradient Optimization, fraction collector bypass, isocratic hold, remote editing, the ability to collect fractions on two separate

wavelengths, use of up to four solvents in a single gradient and add a third isocratic co-solvent. A UV-VIS detector can increase detection to 200–800 nm.

Isolera Spektra LS runs the same Isolera Spektra software as research scale models (see page 8), bringing even more advanced time and money saving features to large scale purification labs.

Accelerated Purification

The flow rate capability (of 50–500 mL/min) and gradient optimization dramatically shorten purification runs. When used with Biotage® SNAP 1500 g cartridges, the Isolera LS can rapidly purify samples of 150 g or more, dramatically improving chemists' productivity in a matter of a few column volumes (Figure 10).

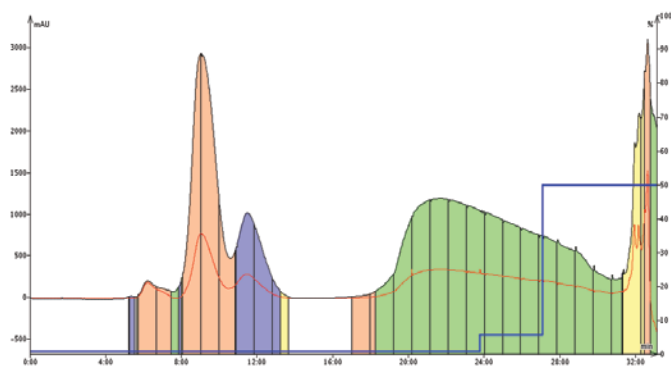


Figure 10. 30 g of a lipophilic oil mixture was purified in only 32 minutes using a Biotage® SNAP 1500 g cartridge at a flow rate of 500 mL/min.

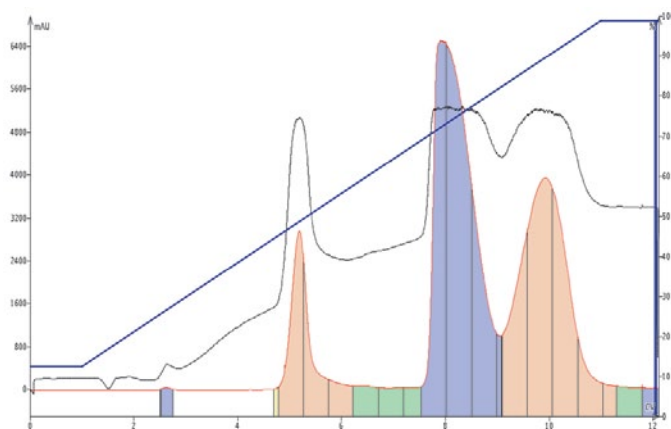


Figure 11. 80 g (>10% load) of a crude reaction mixture with a TLC $\Delta CV < 1$ was separated using a Biotage® SNAP 750 g cartridge at 200 mL/min.

Specifications

Solvent Delivery	2x HPFC pumps
Flow Rate	50–500 mL/min
Pressure Limit	145 psi (10 bar)
UV Detection	Choice of variable wavelength (200–400 nm) or UV-VIS (200–800 nm) detector
Flow Cell Path Length	0.3 mm
UV Collection Modes	One, two or all wavelengths
Fractionation Modes	Volume, threshold, threshold with volume, low slope, medium slope, custom slope or connect external detector
Collection Vessels	Test tubes (17.5 mm, 18 mm and 25 mm) and bottles (120 mL, 240 mL, and 480 mL)
Power	100–240 VAC, 50/60 Hz, 4.0 A
System Control & Data Management	On-board computer with 10.4" diagonal touch screen interface
Dimensions (W x H x D)	577 mm (22.7") x 596 mm (23.5") x 497 mm (19.6")
Weight	30–35 kg (66–77 lbs)
Certifications	CE, cTÜVus
Funnel Rack Kit Dimensions (W x H x D)	960 mm (37.8") x 1060 mm (41.7") x 660 mm (26.0")
Weight	40 kg (88 lbs)

Biotage® SNAP 750 g and SNAP 1500 g cartridges maximize productivity by providing the highest sample loading capacity, fastest throughput and superior large-scale separations as shown in Figure 11.

Safely Inject Large Volumes

The unique built in sample load pump avoids manual injection issues such as leaks or spills. Made with flexible fluoropolymer tubing, this pump enables liquid samples to be efficiently pumped directly into your Biotage SNAP 750 g or 1500 g flash cartridge.

For samples requiring pre-adsorption onto a solid support, a 500 g capacity dry load vessel accessory is available. The dry load vessel has an adjustable bed for samples as low as 100 g and mounts directly onto the Isolera LS, saving fume cupboard space.

Key Features

» Refer to page 11 for main key features of Isolera™ Spektra

Other Advantages

- » Flow rates of 50–500 mL/min
- » Method evaluation and scale-up on one system
- » Unique sample loading pump
- » Extended fraction capacity up to 320 L
- » Use up to four solvents in a gradient
- » Maximize solubility and product recovery
- » Leak detector increases safety