

Use the TLC-to-gradient feature for optimal purification.

High-capacitive screen with fast and accurate response.

A wide range of removable racks accommodates all lab needs.



Convenient solvent bottle rack utilizes up to four 4 L bottles.

The built-in UV detector provides targeted fraction collection.



Quattro-binary gradient capability resolves complex sample mixtures.

## Isolera™ Spektra One and Four

### Advanced Purification in Compact Systems

The Isolera™ flash purification family is designed to help purify synthetic reaction mixtures, natural product extracts and other mixes of organic compounds. Isolera One is a single cartridge system, and the 4-cartridge system of Isolera Four is ideal for multi-user or high-throughput laboratories.

Isolera™ methods can easily be edited either on the touch screen or remotely from the comfort of your office. Edit the gradient (click & drag points and segments), flow rate, collection volume, fraction wavelengths and modes, add more collection racks if you need to – all while the run is in progress.

Combined with the powerful features in the Isolera Spektra software (see page 8), Isolera One and Four can perform advanced chromatography typically reserved for the most expensive or bespoke customized systems on the market.

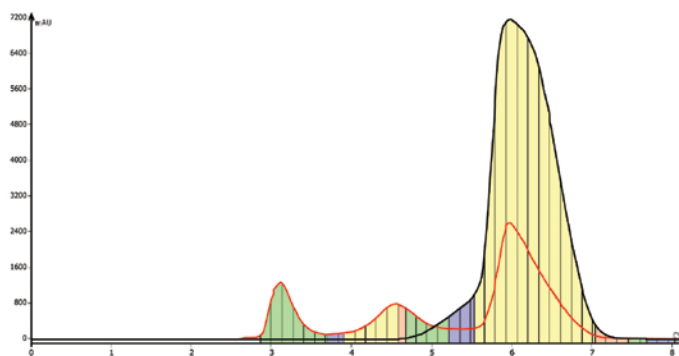
For example: PDA scanning and  $\lambda$ -All technology detects any UV absorbing compound eluting from a flash cartridge while measuring and displaying each eluting compound's full UV spectrum. With the novel baseline correction, yield losses to sub-optimal wavelength selection and large fraction volumes are no longer a concern. The PDA spectrum can also be reviewed and used to determine fraction purity eliminating the need for post-flash purity analysis.

### Quattro-Binary Gradient / Powerful Solvent Modifier

Use up to four solvents in a single gradient to easily purify samples with diverse polarity. With this quattro-binary gradient capability, traditional binary gradients with a limited polarity range can be adjusted to elute very lipophilic and highly polar compounds within a single purification.

## Specifications

<b>Solvent Delivery</b>	Two constant volume (3 mL) electric HPFC pumps
<b>Flow Rate</b>	1–200 mL/min
<b>Pressure Limit</b>	145 psi (10 bar)
<b>Sample Interval</b>	Milligrams–75 grams
<b>UV Detection</b>	Choice of variable wavelength (200–400 nm), fixed (254 nm), or UV-VIS (200–800 nm) detectors
<b>Flow Cell Path Length</b>	0.3 mm
<b>UV Collection Modes</b>	Single/dual/ $\lambda$ -All wavelengths (variable UV and UV-VIS)
<b>Fractionation Modes</b>	Volume, threshold, threshold with volume, low slope, medium slope, custom slope or via external detection
<b>Collection Vessels</b>	Test tubes (13 mm, 16 mm, 18 mm, and 25 mm) and bottles (120 mL, 240 mL, and 480 mL)
<b>Power</b>	100–240 VAC, 50/60 Hz, 4.0 A
<b>System Control &amp; Data Management</b>	On-board computer with 10.4" capacitive touch screen interface
<b>Dimensions (W x H x D)</b>	355 mm (14") x 596 mm (23.5") x 497 mm (19.6"). Add 178 mm (7") with EXP
<b>Weight</b>	30–35 kg (66–77 lbs)
<b>Certifications</b>	CE, cTUVus



**Figure 9.** Fractionation using two wavelengths ensures collection of UV absorbing compounds at both wavelengths avoiding needlessly filling all fraction tubes with product and solvents.

## Ternary Co-Solvent

Isocratically pump a third solvent into any binary gradient to help maintain compound solubility and eliminate potential overpressure from precipitating compounds.

## Superior Results With Biotage Flash Cartridges

The Isolera™ Spektra One and Isolera Spektra Four systems are compatible with SNAP, SNAP Ultra, ZIP and ZIP Sphere cartridges, from 5 g to 750 g sizes (1500 g for Isolera LS).

## Key Features

- » TLC-to-Step gradient
- » Gradient Optimization reduces solvent by up to 60%
- » Real-time PDA scanning

- » 2D and 3D spectral analysis
- » Optimized for Biotage® SNAP Ultra cartridges
- »  $\lambda$ -All detection
- » Baseline correction
- » Run counter

## Other Advantages

- » Flow rates of 1–200 mL/min
- » Method evaluation and scale-up on one system
- » Fraction capacity up to 9.6 L
- » Biotage® Isolera™ Spektra Four allows sequential purification of multiple samples
- » Transfer methods to other Isolera systems