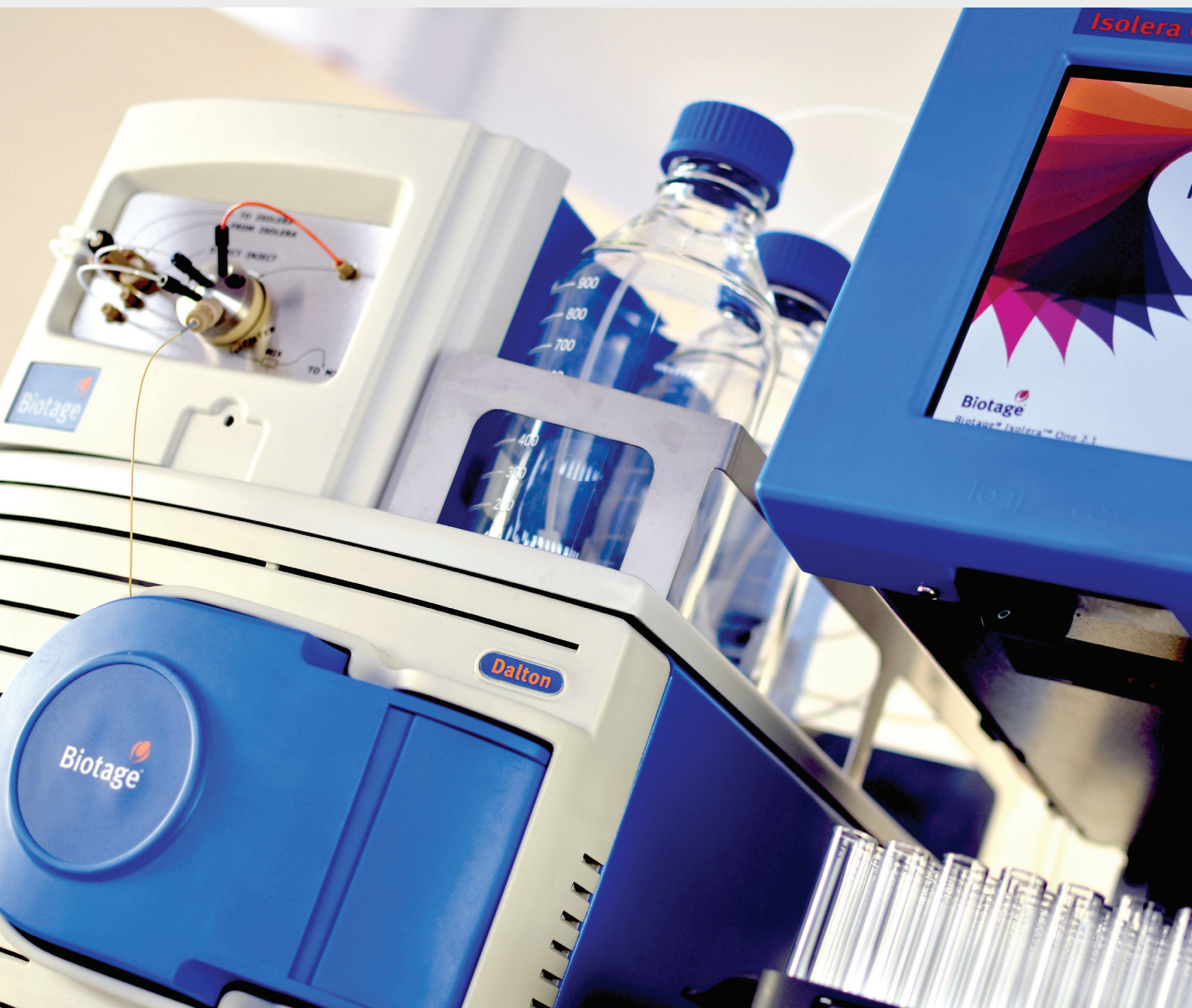


# Isolera™ Dalton

Mass Directed Flash Chromatography



The Isolera™ Dalton Nanolink automatically handles all liquid flows between the Isolera™ system and the Isolera™ Dalton Mass Detector.

Biotage's Isolera™ systems with Isolera Spektra software are the most advanced flash chromatography systems available.

Includes syringe port for direct injection of reactor content.

Internal vacuum pumps with 30 minute pump down time.

The Isolera™ Dalton Mass Detector contains a miniaturized mass analyzer optimized for use in flash chromatography, providing instant confirmation of the collected fraction's mass.



Overall footprint fits in a regular fume hood.

The mass fractions targeted by the user are collected directly on purification.

## Isolera™ Dalton

### Flash Chromatography with Integrated Mass Identification

Be sure you have your target compound the moment your purification is complete. The Isolera™ Dalton integrates the Biotage approach to flash chromatography with true compound identification using mass detection.

For the first time, Flash chemists can automatically collect targeted mass fractions of their compounds on a flash system. Isolera™ Dalton is nothing less than a fully-fledged mass identifier system specifically designed to plug seamlessly into the Isolera™ family.

Provided by a company with over twenty years' experience in Flash chromatography, the Isolera Dalton represents the most advanced and innovative purification system available, designed by people who understand Flash purification and the needs of the synthetic chemist.

#### Streamlined Workflow

The Isolera Dalton brings mass detection to flash chromatography. This system identifies compounds by mass in real time during Flash separation, leading to greater confidence in purification and a significant saving in time and money. This combination of identification and purification removes complex off-line analytical steps from the workflow, vastly increasing throughput and putting the entire purification and analysis in the hands of the chemist.

Reactor content can be injected directly to identify target masses, which then are transferred directly to the Flash method for mass targeted purification.

#### Tailored Technology

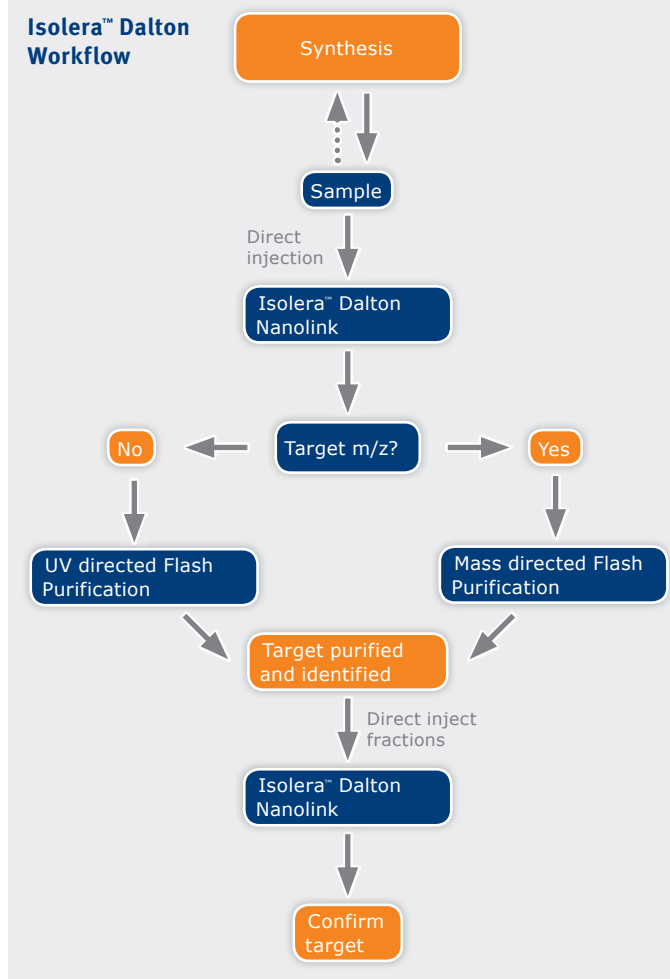
We have borrowed technology from mass detector systems and scaled it in an unparalleled way for Flash purification, creating

## Specifications

<b>Dimensions (W x D x H)</b>	Isolera™ Dalton Mass Detector: 35.5 x 56 x 25 cm Isolera™ Dalton Nanolink: 35.4 x 52.5 x 21 cm Isolera™ Dalton system: 85 x 59 x 62 cm
<b>Weight</b>	Isolera™ Dalton Mass Detector: 32 kg Isolera™ Dalton Nanolink: 10 kg Isolera™: 35 kg Isolera™ Dalton system: 77 kg
<b>Mass analyzer</b>	Miniaturized single quadrupole
<b>Ionization source</b>	Chip based electrospray ionization
<b>Detection range</b>	m/z 80–800
<b>Mass accuracy</b>	± m/z 0.5 in full scan in a temperature controlled environment, ±3 °C
<b>Mass resolution</b>	m/z 0.7 ±0.1 FWHM in full scan in a temperature controlled environment, ±3 °C
<b>Sampling adjustment</b>	Automatic
<b>Start-up time</b>	30 minutes*
<b>Vacuum pumps</b>	Fully integrated
<b>Control interface</b>	Isolera™ Spektra
<b>User serviceable parts</b>	Spraychip® (chip based ESI source) Vac-chip™ (micro engineered atmospheric pressure interface)
<b>Compatible systems</b>	Isolera™ Spektra Flash Chromatography systems
<b>Gas requirement</b>	2–6 bar N <sub>2</sub>
<b>Gas consumption</b>	2.5 L/min
<b>Power requirement</b>	100–240 V AC; 50–60 Hz
<b>Power consumption</b>	320 VA (Isolera™ Dalton Mass Detector) 130 VA (Isolera™ Dalton Nanolink)
<b>Certifications</b>	CE, cTUVus

\*Includes pump-down to vacuum.

## Isolera™ Dalton Workflow



Isolera™ Dalton workflow model. After filtration, samples can be injected directly into the Isolera™ Dalton Nanolink for mass identification, either for m/z targeting or fraction confirmation.

a system that brings these technologies together for the first time. Minimal user intervention required makes it available to chemists unfamiliar with mass detection or those whose priorities lie in compound synthesis rather than analysis.

The Isolera Dalton Mass Detector uses a chip-based electrospray system with a miniaturized quadrupole and internal vacuum pumps, allowing the system to easily fit in a fume hood, and is capable of handling both normal and reverse-phase samples with ease.

## Intelligent Integration

Seamless interaction between a flash system and a mass detector requires advanced technology and fine tuning. This is all taken care of by the Isolera Dalton Nanolink interface, an intelligent sampling device that at any given moment provides the Dalton Detector with the exact amount of sample

required, and dynamically adjusts to the solvent effluent flow rate employed in the Flash system.

The Isolera Spektra software with its graphic user interface provides a straightforward controlling environment, giving easy access to the process.

## Advantages

- » Compound identification by mass during purification and by direct injection
- » Fully automated integration of Flash purification and mass detection via the Isolera™ Dalton Nanolink
- » Automatically accommodates different flash flow rates
- » Simple wizard-based approach to method development
- » Compact system with miniaturized mass detector, easily fits inside a fume hood with no external pumps



# Your Complete Partner for Effective Chemistry

Biotage is a worldwide supplier of instruments and accessories designed to facilitate the work of laboratory chemists. With our deep knowledge of the industry, academic contacts and in-house R&D teams, we can deliver the best solutions to your challenges. We take great pride in our flexibility and ability to meet our customer's individual needs. With strong foundations in both analytical and organic chemistry, we can offer the widest range of solutions available on the market.

## EUROPE

Main Office: +46 18 565900  
Toll Free: +800 18 565710  
Fax: +46 18 591922  
Order Tel: +46 18 565710  
Order Fax: +46 18 565705  
[order@biotage.com](mailto:order@biotage.com)

## NORTH & LATIN AMERICA

Main Office: +1 704 654 4900  
Toll Free: +1 800 446 4752  
Fax: +1 704 654 4917  
Order Tel: +1 704 654 4900  
Order Fax: +1 434 296 8217  
[ordermailbox@biotage.com](mailto:ordermailbox@biotage.com)

## JAPAN

Tel: +81 3 5627 3123  
Fax: +81 3 5627 3121  
[japan\\_info@biotage.com](mailto:japan_info@biotage.com)

## CHINA

Tel: +86 21 2898 6655  
Fax: +86 21 2898 6153  
[cn\\_order@biotage.com](mailto:cn_order@biotage.com)

To locate a distributor,  
please visit our website at  
[www.biotage.com](http://www.biotage.com)