



Faster Insights. Smarter Decisions. Better Outcomes.

Real-time reaction monitoring
with the **Axcend Focus LC®** & **InFocus™**



Scientific breakthroughs and process optimizations require fast, accurate, and reliable data. As a Process Analytical Technology (PAT) tool, the InFocus enables real-time, in-line, on-line, and at-line analysis, allowing scientists and engineers to detect inefficiencies, optimize reactions, and improve product quality without delays. Seamlessly integrating with the Axcend Focus LC, this compact, automated system provides unparalleled sample preparation and analysis, delivering immediate, actionable insights right at the reaction site—whether in a fume hood or directly next to the vessel.



In-Line Monitoring

The Axcend InFocus continuously samples directly from the reaction stream, providing real-time HPLC data without disrupting the process. This ensures immediate detection of impurities, reaction progress tracking, and on-the-fly adjustments, optimizing yield and reducing waste.



At-Line Monitoring


For workflows requiring frequent but controlled sampling, the InFocus enables on-demand HPLC analysis right next to your reactor. Operators can pull samples as needed, analyze them within seconds, and make data-driven decisions—without waiting for lab results.





On-Line Monitoring


With automated sampling and analysis at set intervals, the InFocus helps teams maintain process stability, prevent deviations, and optimize batch-to-batch consistency. This approach is ideal for ensuring product quality while minimizing manual intervention.


Key Features

 **Compact Design**
Fits in lab hoods or next to reaction vessels.

 **Automated Workflow**
Unattended sampling and analysis reduce manual effort.

 **Versatile Reaction Monitoring**
Tracks batch or continuous processes, even with limited sample availability.

 **Accurate Results**
Optimized prep minimizes false positives and background noise.

 **Flexible Configuration**
Customizable valves support diverse workflows.

Technical Specifications

Dimensions (WxDxH)	22.8 x 24.2 x 23.3 cm (8.7 x 9.6 x 9.2 in)
Weight	5.4 kg (11.9 lb)
Pump System	Bi-directional, 1500psi, 5.0 nL/min - 5.0 mL/min programmable
Valves	2 x 5000psi multiposition, 2 x 5000psi 2-position; 3x 5000 psi LDV switching valves (standard configuration: 2x 3-port 2-position, 1x 6-port 2-position for automated online sampling/filtering with automated filter backflush)
Injection Volume	0.1 - 50.0 μ L (> with multiplex loading)
Operating Conditions	4 - 45 $^{\circ}$ C, max 80% relative humidity (non-condensing)
Solvent Compatibility	Typical RP/NP mobile phases, pH range 2.0-10.0
Electrical Power	100-240 VAC, 50/60 Hz
Communication	USB
Software Control	InFocus Routine Designer

Small and Mighty

The Focus suite of instruments and accessories is built upon the foundation of the Axcend Focus LC[®] and utilizes patented and miniaturized technology that provides a high level of sensitivity, separation power and flexibility. The Focus LC is available with a range of UV-LED and deuterium lamp options. The Focus line offers two sampling accessories, the AutoFocus[™] with a 40 vial / 96 well plate autosampler and the InFocus[™] for PAT monitoring. Superior sensitivity and linearity are possible with Axcend's FocusArray[™], a broad spectrum diode array detector. Each module sits neatly on top of or beneath the Axcend Focus LC to minimize instrument footprint and enable mobile use. The system is compatible with capillary columns from vendors across the industry, providing immense application flexibility.

