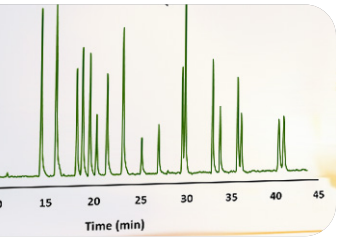
AXCEND

Expand Detection.
Elevate Results.

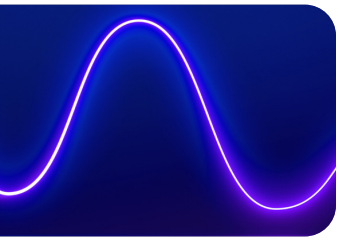
FocusArray™ redefines capillary LC detection with three orders of magnitude linearity and full UV absorbance coverage in a reduced footprint.

The FocusArray full-spectrum detector unlocks new levels of sensitivity, linearity, and data quality for capillary HPLC workflows. Purpose-built for the Axcend Focus LC®, this DAD delivers a full UV absorbance spectrum from 190–700 nm with unprecedented precision—giving you greater confidence in every analysis. Combining industry-leading optics with advanced capillary design, FocusArray enables superior trace detection and robust quantification, all in a compact, easy-to-integrate package.



Superior Sensitivity for Trace-Level Analysis

With an 12 nL flow cell volume and 1.2 mm path length, FocusArray offers outstanding sensitivity—empowering you to detect trace components without sacrificing accuracy.



Exceptional Linearity Across the Full UV Range

FocusArray achieves three orders of magnitude linearity, ensuring reliable quantitation even across samples with widely varying concentrations. Confidently characterize target analytes and minor impurities in a single run.

Seamless Integration for Real-Time Insight

FocusArray works hand-in-hand with the Focus LC, controlled from a single software interface. Monitor reactions, QC processes, and separations in real-time without added complexity.

Technical Specifications

Dimensions (WxDxH)	23.9 x 37.6 x 14.2 cm (9.4 x 14.8 x 5.6 in)
Weight	5.7 kg (12.6 lb)
Flow Cell	12 nL volume, 1.2 mm pathlength
Maximum Flow Cell Operating Pressure	6.8 bar (100 psi)
Detection Channels	8 (digital) / 4 (analog)
Number Of Diodes	256
Pixel Pitch	2 nm/diode
Light Source	Deuterium (D_2) lamp with integrated GLP chip
Wavelength Range	190-700 nm with optional tungsten lamp (type 190-400 with D_2 lamp)
Spectral Bandwidth	<10 nm at 254 nm Hg line (FWHM)
Wavelength Verification	Internal holmium filter and deuterium lines
Maximum Data Rate	100 Hz (LAN) / 12.5 Hz (analog)
Time Constants	0.00 / 0.01 / 0.02 / 0.05 / 0.1 / 0.2 / 0.5 / 1.0 / 2.0 / 5.0 / 10.0 s
Integration Time	Automatic
Drift	400 µAU/h at 255 nm (2 Hz data rate)
Linearity	Up to 3 orders of magnitude (peak area of propylparaben at 255 nm)
Limit Of Detection	0.0125 ppm (propylparaben at 255 nm at S/N = 3)
Solvent Compatibility	Typical RP/NP mobile phases, pH range 2.0-10.0
Detection Channels	8 (digital)/4 (analog)
Electrical Power	100-240 VAC, 50/60 Hz
Communication	TCP/IP Ethernet
Software Control	Agilent OpenLab, DataApex Clarity
Operating Conditions	4 - 45 °C, Max 80% Relative Humidity (Non-condensing)

Key Features

Full UV-Visible Wavelength Range (190–700 nm)
Capture maximum absorbance points with precision across a broad spectral window.

Compact, Capillary-Optimized Flow Cell
12 nL volume and 1.2 mm pathlength minimize dispersion and maximize sensitivity, designed specifically for low-flow separations.

Fast, Reliable Data Acquisition
High-speed data collection up to 100 Hz enables sharper peak profiles and more robust peak integration with minimal baseline drift.

Quick-Access Maintenance
Deuterium lamp replacement is simple and fast through a front-panel access door, reducing downtime and improving lab efficiency.

Enhanced Data Traceability
RFID tagging on lamps and flow cells ensures reliable performance tracking, supporting regulatory compliance and good laboratory practices (GLP).

Small and Mighty

The Focus suite of instruments, built on the foundation of the Axcend Focus LC®, leverages patented miniaturized technology for high sensitivity, separation power, and flexibility. It offers UV-LED and deuterium lamp options, plus two sampling accessories: AutoFocus™ (40 vial/96 well plate autosampler) and InFocus™ (PAT monitoring). The FocusArray™ diode array detector ensures superior sensitivity and linearity. Each module stacks seamlessly for a small footprint and mobile use, supporting capillary columns from a variety of vendors for broad application flexibility.

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Trusted Results. New Possibilities.

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