

Axcend FocusArray

Full Spectrum Diode Array Detector for Capillary Liquid Chromatography

190 -700 nm, diode array detector

The Axcend FocusArray is the ideal choice for your challenging liquid chromatography requirements. The only diode array detector for capillary HPLC offers a full three orders of magnitude linearity needed to identify trace elements in the presence of your target analytes.



Axcend AutoFocus

Axcend Focus LC

FocusArray

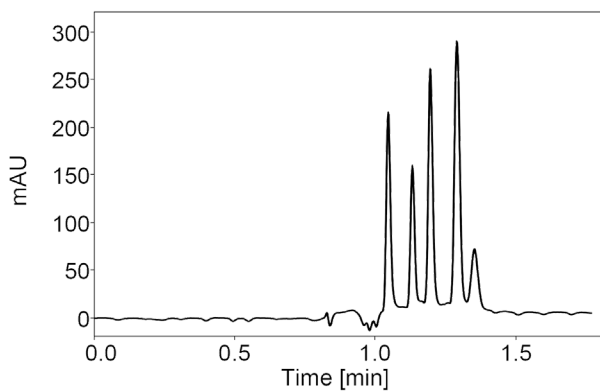
Integration and Efficiency

Built upon the foundation of the Axcend Focus LC®, the smallest full-stack system in the industry also includes Axcend AutoFocus™, a 40-vial / 96-well plate autosampler, and FocusArray, the broad spectrum diode array detector (DAD). This low-flow, small footprint system enables real-time data analysis at the point of sampling.

The 1.1 mm path-length in an 11 nL volume provides outstanding sensitivity when combined with the Axcend Focus LC®. Fluidic connections are made easy with a 25 µm ID / 360 µm OD PEEKSil transfer-line and Axcend's award-winning cartridge that contains the separation.

AT A GLANCE

- Removes the constraint from LED-based light sources - Radio frequency identification (RFID) tags for all flow cells and UV lamp provide new levels of data traceability by re-cording parameters such as cell dimensions, lamp usage, serial number.
- Full UV absorption spectrum to view maximum absorbent points.
- More reliable and robust peak integration process due to less baseline drift.

**Pharma Test Mix:**

sulfamethazine, carbamazepine,
ketoprofen, flavone, amcinonide (100 µg/mL)

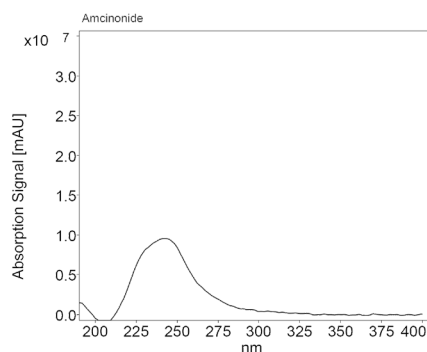
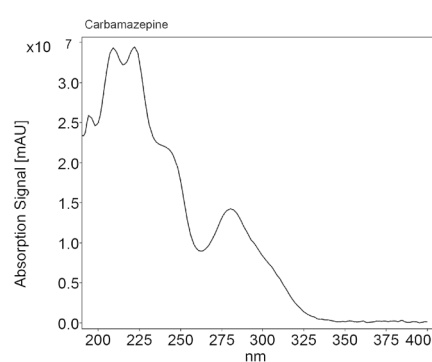
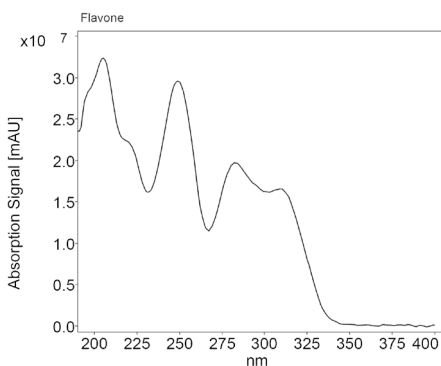
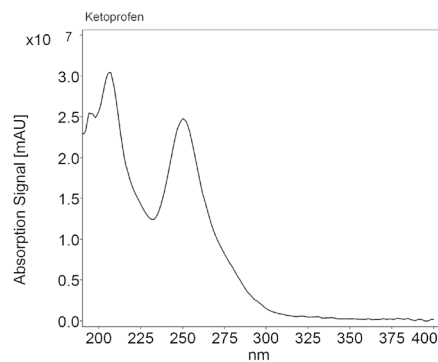
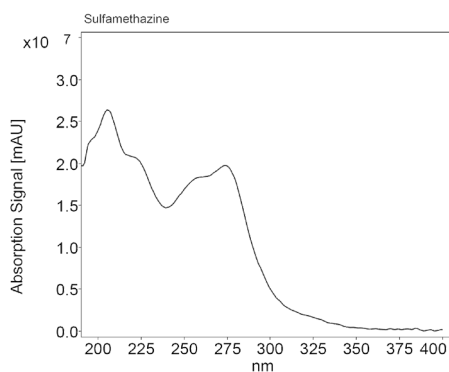
Column:

HSS T3, 100 Å, 1.8 µm, 150 µm x 100 mm

Method:

Gradient at 2 µL/min flow rate

Injection Volume: 40 nL



Technical Data

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
Spectral bandwidth	<10 nm at 254 nm Hg line (FWHM)
Wavelength accuracy	± 1 nm
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)
Dimensions	(W x D x H): 36.1 x 52.3 x 15.8 cm (14.2 x 20.6 x 6.2 in.)
Weight	27.7 lbs/12.6 kg
Power supply	100 - 240 V, 50 - 60 Hz, 75 W

Communication

Inputs	Error (IN), Start (IN), Autozero
Outputs	Events 1 - 2 (Relay and TTL compatible), Error (OUT), + 5 V, Valve + 24 V, Valve (OUT)
Analog outputs	4 x 0 - 5 V, 20 bit, offset adjustable
Control	Control: Software, event control, analog, terminal protocol
Interfaces	LAN (RJ-45), RS-232 (SUB-D 9, service only), multi-pin connector, analog (RCA cinch connector)

