

AZURA Detector DAD 6.1L

Diode array detector

Article Nr.: ADC11



AZURA DAD 6.1L, diode array detector

The AZURA DAD 6.1L is a high-end diode array detector (DAD) which combines outstanding performance with easy handling.

A wide range of easily exchangeable flow cells make this device the right choice for fast, standard analytical, semi-preparative and preparative separations with bio-compatible or stainless steel wetted parts.

State-of-the-art total reflection flow cells (LightGuide technology) are available for this detector providing maximum light throughput (due to total internal reflection) with minimal peak dispersion (due to small cell volume) to guarantee an optimized signal to noise (S/N) ratio.

An optional fiber optics adapter offers the possibility to separate the flow cell spatially from the device and thus provides enhanced security for hazardous, explosive or toxic work processes, as well as protecting the device from leakages at high flow rates.

The newly developed optical unit with KNAUER Polka-Dot technology and intelligent temperature management ensure maximum sensitivity combined with minimal baseline drift over the whole spectrum. Furthermore, easy frontal access and improved safety features enable effortless lamp replacement. This eases maintenance and guarantees short downtimes.

The DAD 6.1L comes installed with a high brightness deuterium and tungsten halogen lamps, which cover a wavelength range from 190 to 1000 nm. This detector can be controlled with OpenLab® EZChrom Edition, ClarityChrom®, Chromeleon® and PurityChrom® software, as well as from the Mobile Control software (stand-alone operation), via LAN or through analog input/output, allowing it to be integrated into almost any LC system.

Key features

- wide application range through variety of flow cells
- user friendly
- extended wavelength range 190 - 1000 nm
- impressive sensitivity/price ratio
- data acquisition rate up to 100 Hz




- optional touch display
- leak management

Details



Detection	
Detector type	Diode array detector
Number of diodes	1024
Pixel pitch	0.8 nm/diode
Detection channels	8 (Digital) 4 (Analog)
Light source	High brightness deuterium (D ₂) lamp and halogen lamp with integrated GLP chip
Wavelength range	190 - 1000 nm
Spectral bandwidth	< 3.5 nm at H _α line (FWHM) <i>Note: digital bandwidth 1 - 32 nm</i>
Wavelength accuracy	± 1 nm
Wavelength verification	Internal holmium filter and deuterium lines
Noise	± 3.5 μAU at 254 nm
Drift	300 μAU/h at 254 nm
Linearity	> 2.5 AU at 274 nm
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
Flow cell	not included (see Accessories / Spare parts)
Integration time	automatic
Communication	
Maximum data rate	100 Hz (LAN) 12.5 Hz (analog)
Interfaces	LAN (RJ-45), USB (service only), multi-pin connector, analog (RCA cinch connector)
Control	Mobile Control, software, event control, analog, terminal protocol
Inputs	Error (IN), Start (IN), Autozero
Outputs	Events 1 - 2 (Relay and TTL compatible, respectively), Error (OUT), + 5 V, Valve + 24 V, Valve (OUT)
Analog outputs	4 x 0 - 5 V, 16 bit, offset adjustable
Technical parameters	












GLP	Detailed report including lamp recognition, operating hours, lamp operating hours, number of lamp ignitions
Display	Mobile Control (optional)
Ambient conditions	Temperature range: 4 - 40 °C, 39.2 - 104 °F Humidity: below 90 % non-condensing
General	
Power supply	100 - 240 V, 50 - 60 Hz, 75 W
Dimensions	361 x 158 x 523 mm (W x H x D)
Weight	13.8 kg
Leak sensor	Yes
Note	Flow cells are not included and must be ordered separately (see Accessories / Spare parts)








Downloads

	AZURA Detector DAD 6.1L, DAD 2.1L, MWD 2.1L user manual	AZURA Detector DAD 6.1L, DAD 2.1L, MWD 2.1L user manual, V6700	English
	AZURA Detektor DAD 6.1L, DAD 2.1L, MWD 2.1L Benutzerhandbuch	AZURA Detektor DAD 6.1L, DAD 2.1L, MWD 2.1L Benutzerhandbuch, V6700	Deutsch
	List of supported devices in chromatography data systems	Device support in KNAUER CDS / KNAUER device support in 3rd party software	English



Accessories / Spare parts

	Mobile Control	Software controlling AZURA devices/ system including 10" tablet	A9607
	Deuterium Lamp HB	for AZURA DAD 6.1L detector	AZL01

	Halogen Lamp	for AZURA DAD 6.1L detector	AZL02
	Tool kit AZURA	tool kit for systems with PEEK or precut capillaries	A1033
	Accessory kit AZURA DAD 6.1L, DAD 2.1L, MWD 2.1L	included in shipkit	FDC
	Accessory kit AZURA large devices	cable kit for all devices with footprint "L" included in shipkit	FZA02
	Standard KNAUER LightGuide UV Flow Cell Cartridge	10 mm path length, 1/16", 2 µl volume, 50 bar	AMC19XA
	High Sensitivity KNAUER LightGuide UV Flow Cell Cartridge	50 mm path length, 1/16", 6 µl volume, 50 bar, biocompatible	AMD59
	Analytical KNAUER PressureProof UV Flow Cell Cartridge	10 mm path length, 1/16", 10 µl volume, 300 bar, biocompatible	AMC38
	Semi-preparative KNAUER PressureProof UV Flow Cell Cartridge	3 mm path length, 1/16", 2 µl volume, 300 bar, biocompatible	AMB18
	Fiber Optics Adapter	for AZURA DAD 6.1L, DAD 2.1L, MWD 2.1L detectors	AMKX8
	Fiber Optics Adapter Kit	for AZURA DAD 6.1L, DAD 2.1L, MWD 2.1L detectors	AMKX8KIT
	Cartridge Test Cell	for AZURA DAD 6.1L, DAD 2.1L, MWD 2.1L detectors	AMLX8
	Analytical UV Flow Cell	10 mm path length, 1/16", 10 µl volume, 300 bar, stainless steel, fiber optic connectors	A4074
	Semi-preparative UV Flow Cell	3 mm path length, 1/16", 2 µl volume, 300 bar, stainless steel, fiber optic connectors	A4044

	Semi-preparative UV Flow Cell	3 mm path length, 1/16", 2 µl volume, 30 bar, biocompatible, fiber optic connectors	A4047
	Preparative UV Flow Cell	0.5 mm path length, 1/16", 3 µl volume, 200 bar, stainless steel, fiber optic connectors	A4089
	Preparative UV Flow Cell	0.5 mm path length, 1/16", 3 µl volume, 100 bar, biocompatible, fiber optic connectors	A4096
	Preparative UV Flow Cell	variable path length and variable volume, 1/8", 200 bar, stainless steel, fiber optic connectors	A4078
	Preparative UV Flow Cell	variable path length and variable volume, 1/8", 100 bar, biocompatible, fiber optic connectors	A4079
	Preparative UV Flow Cell	variable path length and variable volume, 1/4" angular connections, 200 bar, stainless steel, fiber optic connectors	A4081
	Preparative UV Flow Cell	variable path length and variable volume, 1/4" straight connections, 200 bar, stainless steel, fiber optic connectors	A4081V2

Related products

	AZURA Detector DAD 2.1L	190 - 700 nm, diode array detector	ADC01
	AZURA Detector MWD 2.1L	190 - 700 nm, multiwavelength detector	ADB01

Technical data are subject to change without notice.

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