



Article No.: ADC11

Articlename: AZURA Detector DAD 6.1L

High-End Diode Array Detector for Liquid Chromatography and Process Technology

Designed for highest sensitivity through innovative light mixing technology

The AZURA DAD 6.1L is a high-end diode array detector with a wavelength range from 190 to 1000 nm. The large selection of flow cells makes it the ideal choice for all liquid chromatography and process applications. It combines excellent performance with easy handling. The AZURA DAD 6.1L is the right choice with its optional fiber optic adapter and the flexibility related to this feature. Especially for applications that require high flow rates or special safety precautions, this adapter and the physical separation from the flow cell means safety. Due to the innovative optical unit with the KNAUER polka-dot technology, the detector offers maximum sensitivity. This makes it ideal for trace analysis.

Help ligent temperature management enables fast

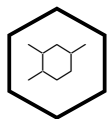
operational readiness after startup. It also minimizes baseline drift. Due to the frontally accessible deuterium and halogen lamp, the device is easy to service. The downtime is thereby reduced to a minimum if a lamp replacement is necessary. For analytical applications, the AZURA DAD 6.1L is controlled by software packages OpenLab[®] EZChrom Edition, ClarityChrom[®], and Chromeleon[®]. The PurityChrom[®] software is also available in the field of purification. The control in the process environment can be implemented via a spring strip, analog outputs, and the Mobile Control.



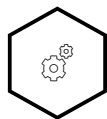
AZURA DAD 6.1L, diode array detector

Help

KEY FEATURES



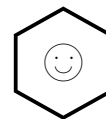
Wide application range



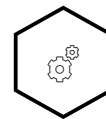
Large choice of flow cells



Fiber optics adapter available



Attractively priced



Made in Germany

Help

TECHNICAL DATA

Help

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) /Note: digital bandwidth 1 - 32 nm
Wavelength accuracy	± 1 nm
Noise	± 3.5 µAU at 254 nm (ASTM E1657-98)
Drift	300 µAU/h at 254 nm (ASTM E1657-98)
Linearity	> 2.5 AU at 274 nm (ASTM E1657-98)
Maximum data rate	100 Hz (LAN)/12.5 Hz (analog)
Help	Not included (see Accessories / Spare parts)

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
Wavelength verification	Internal holmium filter and deuterium lines
Leak sensor	Yes

Communication

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, 20 bit, offset adjustable
Control	Mobile Control, software, event control, analog, terminal protocol
Interfaces	LAN (RJ-45), USB (service only), multi-pin connector, analog (RCA cinch connector)

Help

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

Other

Note	Flow cells are not included and must be ordered separately (see Accessories / Spare parts)
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Help

ACCESSORIES & SPARE PARTS



Deuterium Lamp HB
HBST deuterium lamp for AZURA®
Detector DAD 6.1L

Article No.: AZL01



Halogen Lamp
Halogen lamp for AZURA®
Detector DAD 6.1L

Article No.: AZL02



Tool kit AZURA
Tool Kit AZURA® for systems with
PEEK or pre-cut capillary kits

Article No.: A1033

Help



**Accessory kit AZURA DAD 6.1L,
DAD 2.1L, MWD 2.1L
included in shipkit**

Article No.: FDC



**Accessory kit AZURA large devices
cable kit for all devices with
footprint "L" included in shipkit**

Article No.: FZA02



**Standard KNAUER LightGuide UV
Flow Cell Cartridge**
10 mm path length, 2µl, 1/16", 50
bar, LightGuide Flow cell cartridge
for AZURA® Detector DAD/MWD

Article No.: AMC19XA

Help



**High Sensitivity KNAUER
LightGuide UV Flow Cell Cartridge**
50 mm path length, 6 μ l, 1/16", 50
bar, High Sensitivity LightGuide
Flow cell cartridge for AZURA®
Detector DAD/MWD
Article No.: AMD59XA



**Analytical KNAUER PressureProof
UV Flow Cell Cartridge**
10 mm path length, 10 μ l, 1/16", 300
bar, PressureProof Flow cell
cartridge for AZURA® Detector
DAD/MWD
Article No.: AMC38



**Semi-preparative KNAUER
PressureProof UV Flow Cell
Cartridge**
3 mm path length, 2 μ l, 1/16", 300
bar, PressureProof Flow cell
cartridge for AZURA® Detector
DAD/MWD
Article No.: AMB18

Help

**Fiber Optics Adapter Kit**

Fiber optics adapter kit for AZURA® Detector DAD/MWD, with fiber optic cables (1x 400 mm and 1x 750 mm) and mounting bracket

Article No.: AMKX8KIT

**Cartridge Test Cell**

Test cell for AZURA® Detector DAD/MWD

Article No.: AMLX8

**Analytical UV Flow Cell**

10 mm path length, 10 µl, 1/16", 300 bar, stainless steel, fiber optic connectors, classical KNAUER flow cell

Article No.: A4074

Help



Semi-preparative 3 mm UV Flow Cell

3 mm path length, 2 μ l, 1/16", 300 bar, stainless steel, fiber optic connectors, classical KNAUER flow cell

Article No.: A4044



Semi-preparative bio-compatible 3 mm UV Flow Cell

3 mm path length, 2 μ l 1/16", 30 bar, biocompatible, fiber optic connectors, classical KNAUER flow cell

Article No.: A4047



Preparative UV Flow Cell

0.5 mm path length, 3 μ l, 1/16", 200 bar, stainless steel, fiber optic connectors, classical KNAUER flow cell

Article No.: A4089

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Preparative UV Flow Cell
0.5 mm path length, 3 μ l, 1/16", 100 bar, biocompatible, fiber optic connectors, classical KNAUER flow cell

Article No.: A4096



Preparative UV Flow Cell
2 mm path length, 1/8", 200 bar, stainless steel, fiber optic connectors, changeable to 0.5/1.25 mm, classical KNAUER flow cell

Article No.: A4078



Preparative UV Flow Cell
2 mm path length, 1/8", 100 bar, biocompatible, fiber optic connectors, changeable to 0.5/1.25 mm, classical KNAUER flow cell

Article No.: A4079

Help



Preparative UV Flow Cell
2 mm path length, 1/4" angular
connections, 200 bar, stainless
steel, fiber optic connectors,
changeable to 0.5/1.25 mm

Article No.: A4081



Preparative UV Flow Cell
variable path length and variable
volume, 1/4" straight connections,
200 bar, stainless steel, fiber optic
connectors

Article No.: A4081V2

Help

DOCUMENTS AND MORE INFORMATION

AZURA Detector DAD 6.1L, DAD 2.1L, MWD 2.1L Instructions EN (V6700)

Manual English

AZURA Detektor DAD 6.1L, DAD 2.1L, MWD 2.1L Betriebsanleitung DE (V6700)

Manual German

AZURA Detecteur DAD 6.1L, DAD 2.1L, MWD 2.1L Instructions FR (V6700)

Manual French

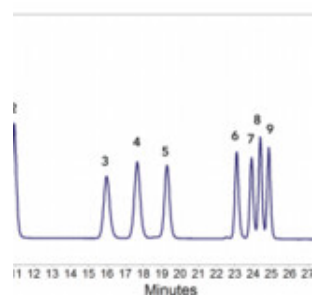
List of supported devices in chromatography data systems EN (V1663)

Device support in KNAUER CDS / KNAUER device support in 3rd party software

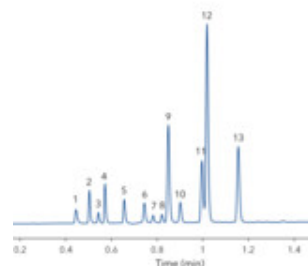
Information English

Help

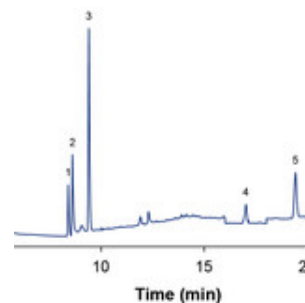
APPLICATIONS FOR THIS PRODUCT



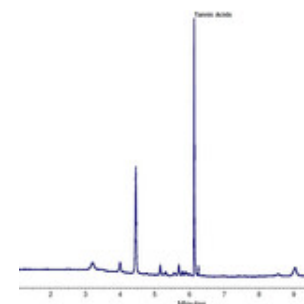
Systematic HPLC method development and robustness evaluation of 13 carbonyl DNPH derivatives using DryLab



Healthy chocolate? – UHPLC determination of ingredients in dark chocolate

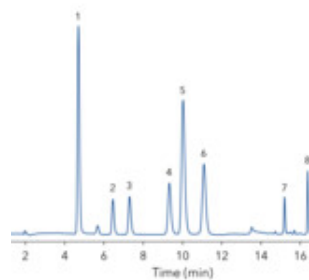


A, B, D, E – Simultaneous determination of water- and fat-soluble vitamins

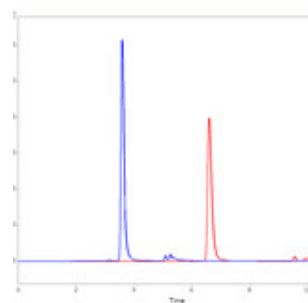


Quantitative determination of gallic acid and tannic acid from gallnut extract

Help



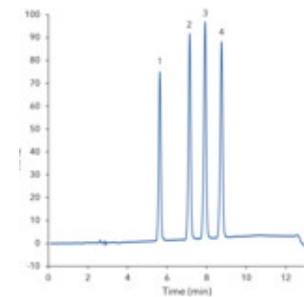
**No blood(y) stress -
Phenolic
antioxidants in olive
oil and olive oil
wastewater**



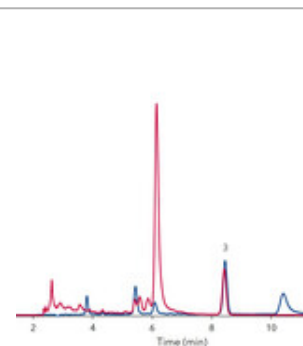
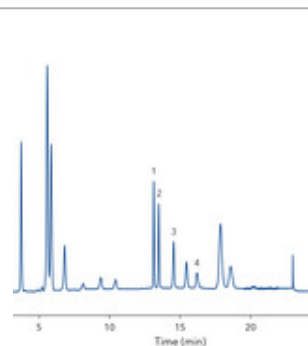
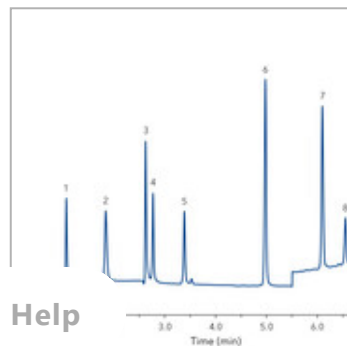
**Fast and sensitive
size exclusion
chromatography of
IgG antibody**



**Verification of the
mycotoxin patulin
from apple juice
with isocratic HPLC**



**Be(e) wary –
determination of
neonicotinoid
insecticides in
honey**



**Separation of
ascorbic acid and
vitamin B complexes
- essentially required
nutrients**

**LC-FLD analysis of 4
PAHs in olive oil
samples using
AZURA® GPC
Cleanup System**

**Alternaria alternata -
determination of
main metabolites**

**Easy and fast
isolation of
rosmarinic acid from
lemon balm with
mass-directed
purification**

Help

RELATED PRODUCTS



**Basic Diode Array Detector for
Liquid Chromatography and
Process Technology**
AZURA® Detector DAD 2.1L Diode
array detector DAD 2.1L without
flow cell 190 - 700 nm, incl. test cell
Article No.: ADC01



**Versatile Multi Wavelength UV-
Detector for Liquid
Chromatography and Process
Technology**
AZURA® Detector MWD 2.1L
Multiwavelength detector MWD
2.1L, without flow cell 190 - 700 nm,
incl. test cell
Article No.: ADB01

RELATED FAQs

What is Polka-Dot Technology?

Detection

Help **What is the AZURA DAD 6.1L extended linear range feature?**
on

How can I measure 3D data with my detector?

Detection

What is the bandwidth of a diode array detector?

Detection

What is baseline correction?

Detection

How can I overcome communication problems with AZURA MWD/DAD 2.1L and DAD 6.1L?

Detection | Troubleshooting

Which UV-wavelength is appropriate for my HPLC application?

Challenges of HPLC separations

Where is my UV light?

Detection

Certified Quality

KNAUER is known for the quality of its products and has been certified several times. We produce high-tech laboratory instruments for research, routine analysis and production for 59 years.

[See all Quality certificates](#)

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In addition, we have extended documentation about all our products, including **CE Declarations of Conformity**.
[See all CE Declarations of conformity.](#)

Innovation and quality - since 1962. Made in Germany.



Do you need more details or a quote?

We are happy to help you



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