RF-10 AXL Fluorescence Detector

Certified quality management
DIN EN ISO 9001

Spectrofluorometric Detector for HPLC Systems

- ✓ **Greater Sensitivity**
- ✓ **Enhanced wavelength accuracy**
- ✓ **GLP / GMP compliance**
- ✓ **Enhanced safety features**

In a Knauer HPLC System the RF-10AXL Fluorescence Detector realizes high sensitivity fluorescence detection in your lab.

The RF-10 AXL fluorescence detector for HPLC offers a refined optical design for the ultimate in high sensitivity detection. This unit offers an improved raman signal-to-noise ratio of 300 for excellent sensitivity.

Futhermore, the use of appropriate excitation and emission spectral scan conditions together with wavelength time programming allows high sensitivity detection of multiple components at trace level concentrations.

The RF-10AXL offers unsurpassed wavelength accuracy (± 2 nm) and wavelength repoducibility (± 0.2 nm) to further enhance the reliability of wavelength selectivity and unit-to-unit performance.

In addition a newly developed ratio system compensates lamp intensity fluctuations and provides superb noise characteristics.

Built-in GLP functions including self diagnostics, maintenance information (number of lamp ignitions, lamp energy) and span calibration functionality are striking characteristics.

Both, heat and leak sensors are provided as standard features. In addition, the lamp may be turned ON/OFF by a time program, to minimize lamp consumption during continuous, unattended runs.

Take the advantage of the high sensitivity and selectivity of fluorescence detection for the analysis of naturally fluorescing and derivatized compounds.

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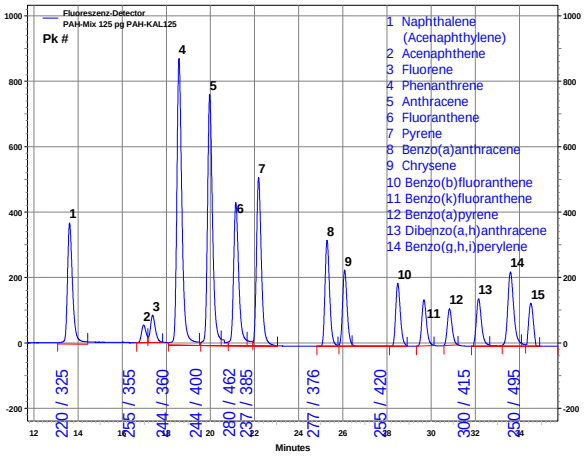
A typical application is the determination of polyaromatic hydrocarbons (pah). Fluorescence detection allows ultra trace analysis for a wide range of applications i.e. analysis of aflatoxines, carbamates, vitamins and amino acids.



system: binaery HPG (s x K-1001 pump with 10 ml pumphead)
2-channel degasser
autosampler K-3800
fluorescence detector RF –10 AXL
software ChromGate®
column: C_{18} ULTRASEP ES PAH , 250 x 2 mm ID
eluent: H_2O – ACN, linear gradient: 60 – 100 % ACN in 28 min, 7 min 100 % ACN
flow: 0.3 ml/min
temp.: 30 °C

RF-10 AXL Fluorescence Detector Specifications

Light source:	High precision Xenon lamp, 150 W
Wavelength range:	200 – 650 nm (200 – 900 nm option)
Band width:	15 nm both in the excitation and emission side
Wavelength accuracy:	± 2 nm
Wavelength reproducibility:	± 0.2 nm
Wavelength moving speed:	approx. 15,000 nm/min
Wavelength scanning speed:	approx. 24 nm/min up to 3000 nm/min in 4 steps
Sensitivity:	300 or greater signal-to noise ration for Raman line of water
Detector:	Signal side: photomultiplier tube, monitor side: photodiode
Time constant:	0.1, 0.5, 1.5 and 3 s
Cell (volume, pressure, material):	12 µL, approx. 20 kgf/cm^2 (2 MPa), Quartz, PTFE as standard (2 µl cell and inert cells are available as option)
Wavelength scanning:	possible both for exication and emission wavelength
Time programming	Wavelength parameters may be programmed in up to 32 steps
Ambient temperature requirements:	4 – 35 °C
Dimension / Weight:	260 W x 520 D x 205 H, 5.9 kg
Power:	100 – 240 V as ordered, 350 VA, 50 / 60 Hz

Ordering Informations

Order No	Article
A0815	Fluorescence Detector RF-10AXL
A0753	Xenon lamp

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