POSTNOVA

PN3412 FLD

Ultrahigh Sensitivity Fluorescence Detector

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PN3412 Fluorescence Detector

Features

The Postnova PN3412 Ultrahigh Sensitivity Fluorescence Detector has an excellent basic performance which offers world-leading sensitivity, excellent ease of maintenance and validation support functions. They support a wide range of applications from conventional analysis to ultra fast analysis.

Ultrahigh Sensitivity

Thanks to a newly designed optical system, the PN3412 offers ultrahigh levels of sensitivity. A water Raman S/N ratio of 2000 for PN3412 makes this detector a powerful tool for analysis that demands the detection off trace-level components.

Cell Temperature Control Further Enhances Reproducibility

The fluorescence intensity drops as the temperature rises. A fluctuation of about 1°C near room temperature may result in approx. 5% intensity fluctuations for some compounds. PN3412 features a temperature-controlled cell with cooling function. It maintains a constant detector cell temperature, even if the room temperature fluctuates significantly, to ensure superb reproducibility with no drop in sensitivity.

Easy Maintencance for Ease of Use

The PN3412 offers excellent ease-of-use as well as superb performance.

Maintenance from Front Panel

The xenon lamp and flow cell can be replaced at the front panel. No positional adjustment is required when replacing the xenon lamp. No tools are required to replace the flow cell. The standard flow cell or semi-micro flow cell can be rapidly switched.

Long-Life Lamp Reduces Running Costs

The xenon lamp is extended to 2000 hours, four times longer than previous lamps. This significantly reduces running costs and down-time due to maintencance.

Validation Functions Provide Powerful Support for Daily Analysis Tasks

The PN3412 offers comprehensive validation functions. In addition to the VP functions PN3412 features an automatic wavelength check to enhance the reliability of the analysis data.

Automatic Wavelength Checks Maintain the Optimal Detector Condition

PN3412 incorporates an automatic wavelenth accuracy check function using an internal low-pressure mercury lamp. It provides simple confirmation of the wavelength accuracy for validation.

Simple Output of System Check Reports

Simple operations from the workstation permit all tasks from conducting the system check to printing the report. The system check automatically checks all items essential for instrument management, such as the lamp life time and wavelenght accuracy. The system check results are automatically saved in the analysis data aquired by the detector to allow confirmation of the instrument status at the time the data was acquired and to further enhance the reliability of the analysis data.

Ordering Information

S-DET-3412-001	PN3412 Fluorescence Detector
S-DET-3412-002	Inert Flow Cell 12 µL
S-DET-3412-003	Photomultiplier R928-08 (extension 200 to 900 nm)
S-DET-3412-004	Semi-Micro Flow Cell 3 µL

Specifications

- Light Source:
  Xenon lamp
  Low-pressure mercury lamp
- Wavelength Range:
  0.200 to 750 nm
- Special Brandwidth:
  20 nm
- Wavelength Accuracy:
  +/- 2 nm
- Wavelength Reproduction:
  +/- 0.2 nm
- S/N:
  Water Raman peak S/N 2000 min.
- Cell Capacity:
  12 µL
- Cell Pressure:
  2 MPa
- Cell Material:
  PTFE (fluororesin), quartz
- Cell Temperature Input Range:
  4 to 40°C, steps 1°C
- Temperature Range:
  (Room temperature -10°C) to 40°C (2 mL/min max. flow rate, 85°C max. oven temperature)
- Simultaneous Monitoring of 2 Wavelengths
- Cell Sampling Period:
  0.5 s per wavelength
- Dimension (WxHxD):
  260 x 210 x 420 mm
- Weight:
  18 kg

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