

flexibel

individuelle Abstimmung

mittelständisch

GOEBEL g
 INSTRUMENTELLE ANALYTIK

Komplettlösungen HPLC & Photometrie

kompetent

HPLC
SOFTWARE
PHOTOMETRIE

Uvikon XS

Advanced Power in UV/Vis Spectroscopy

The **UVIKON** Simplicity Concept represents the first Spectrophotometer Series featuring **Advanced Digital Signal Processing (ADSP)**.

ADSP ensures reliable data acquisition, a superb sensitivity and very low instrument noise to obtain consistent linear measurements even at high basic absorbance values.

The **Uvikon XS** in combination with the easy-to-use control and spectra calculation software **UVSx** supports the entire range of daily routine applications. The integrated formula editor allows full automation of even complex calculations within the basic software. The basic software version fulfills all GLP requirements as any stored result is fully traceable. The 21CFR11 compliant version completely covers the increased regulatory requirements in the pharmaceutical area.

With its large range of accessories the **Uvikon XS** covers all requirements in automated routine operation as well as for advanced special applications.

Your Benefit:

- High data precision and stability thanks to 100% symmetric true double beam technology
- Highest sensitivity even with concentrated samples achieved by rotating mirror system

Specifications:

Wavelength range

190 - 1100 nm

Wavelength step

0.05 - 10 nm

Scan speed

5 - 2,000 nm/min

Transfer speed

5.000 nm/min

Spectral bandwidth

1.8 nm (fixed)

Wavelength accuracy

(Holmium Oxide filter at 10 nm/min / 1 nm slit)

± 0.3 nm

Wavelength precision

(Holmium Oxide filter at 444.4 nm and 2nd wavelength at 536.7 nm, positioning speed 5,000 nm/min)

± 0.03 nm

Baseline flatness, 200 - 800 nm

(200 nm/min scan speed, 1 nm step)

± 1 mAbs

Stray light, NaI, 220 nm, 1 sec

< 0.03% T

Linearity, 250 nm, 1.8 nm, 1 sec, $r^2 > 0,999$

3.3 Abs

Photometric range

± 3.5 Abs

Photometric accuracy

(0.85 Abs, certified filter, 1 sec, 590 nm)

± 3 mAbs

Photometric precision

(0.85 Abs, certified filter, 1 sec, 590 nm)

± 0.5 mAbs

Noise

(RSM, at 580 nm for 5 min, 2 nm, 1 sec)

Better than 30 μ Abs

Drift

(580 nm, 2 nm, 1 sec, after 2 h warm-up)

< 0.1 mAbs/h

Response time

0.02 - 5 sec

Light sources

Deuterium and Tungsten-Halogen

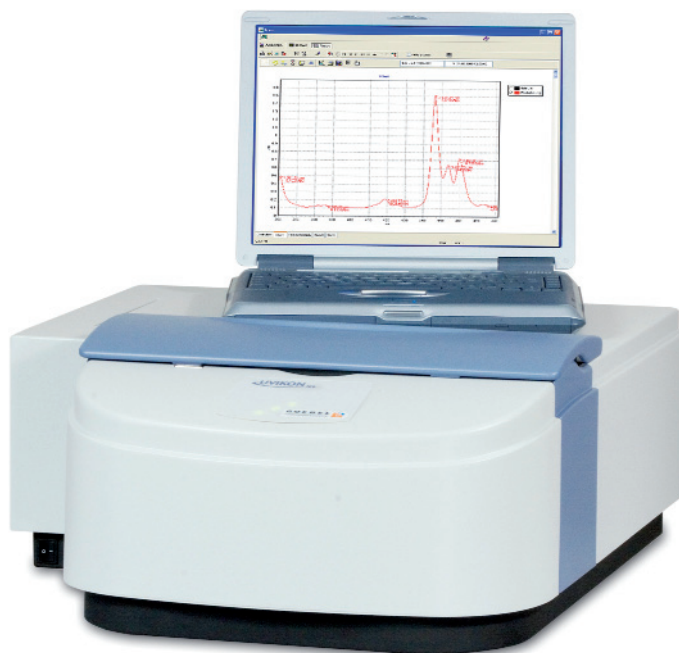
Monochromator

- High energy low stray light diffraction
- grating with 1,300 lines/mm
- 175 mm focal length

Dimensions / Weight

690(W) x 565(D) x 275 mm(H),
35 kg net

Power Supply

100/240 VAC \pm 10%,
50/60 Hz
Max. 200 VA



Technical Description

Sample Compartment

- 140 mm deep, 332 mm wide, 162 mm high, with 120 mm beam separation
- Easy access: front top and back covers are quickly removable
- Three point positioning of accessories for high reproducibility results
- Quartz windows at the beam entrance and exit to the sample compartment prevent contamination of the optics

Accessories

- Thermostatable standard cell holder directly usable with micro and ultra micro cells for small samples
- Large range of optional Quick Lock accessories including a variety of cell holders, stirrer, thermostatable automatic cell changer, temperature sensor, thermostatable sipper, Thermopack and Thermosystem (Peltier Technology)

Environment

- Ambient temperature range: 15 °C to 30 °C

Optical Design

- Well proven true double beam optics with only 6 reflecting surfaces per beam
- High-Energy Zeiss™ Monochromator design using a holographic blazed diffraction grating with 1300 lines per mm
- Very sensitive photodiode with a rotating all-reflecting chopper mirror providing 100% energy in sample and reference beams plus dark current correction
- External source bench providing thermal isolation of the optical bench and protection of the whole photometric assembly against ozone contamination from the deuterium lamp
- Optical bench base manufactured to a tolerance of 0.01 mm in 1 meter
- Complete optical system is sealed against atmospheric contamination from dust and volatile compounds

Control and Calculation Software UVSx Lite

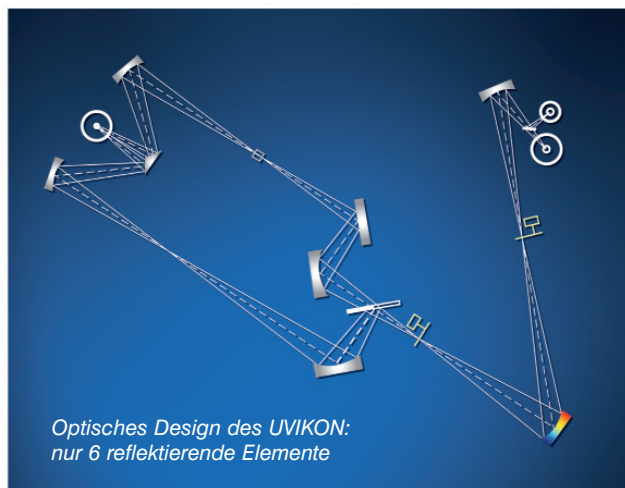
- Measurements at single or multiple wavelengths
- Integrated formulae editor for automatic calculation of even complex relationship
- Spectra scan and result calculation from scan data
- Automated calculation of activity rates in Kinetics, also with multiple samples measured in parallel
- Complete traceability for all stored results with link between raw data, the method and calculation used
- Local data base protects methods, raw data and results against manipulation

The 21CFR11 compliant version features additionally:

- Integrated user management with login and password allows access restriction definition through defined user role
- Complete audit trail
- Electronic signature on selectable level

Ordering Information

99-90289	Uvikon XS (Software UVSX or UVSXL required)
UVSXL	Control & Calculation Software
UVSX	Control & Calculation Software (21CFR11 compliant)
91-00586	6x6 Automatic Cell Changer
91-91465	Thermopack (external waterbath with Peltier Technology)
91-91637	Thermosystem (6x6 Automatic Cell Changer, Peltier-thermostated)
91-91671	Sipper system



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