Routine Power in UV/Vis Spectroscopy

UVIKON XS

The UVIKON concept represents the first spectrophotometer serie featuring **A**dvanced **D**igital **S**ignal **P**rocessing technology.

ADSP ensures reliable data acquisition, a superb sensitivity level to allow linear measurements even at high OD values, and a very low instrument noise. UVIKON XS in combination with the easy to use Windows compatible LabPower Junior software package supports the entire range of daily routine applications.

Benefits:

- 100% symmetric true double beam technology for high data precision and stability.
- Rotating mirror (chopper) system to achieve reliable data even in concentrated samples.

UVIKON XS features the following specifications

Wavelength range	190-1100 nm
Wavelength step	0.05-10 nm
Scan speed	5-2000 nm/min
Transfer speed	5000 nm/min
Spectral bandwidth	1.8 nm (fixed)
Wavelength accuracy with holmium oxide peak, 10 mm/min and 0.05 nm step	± 0.3 nm
Wavelength precision with holmium oxide peak shoulder, 7000 mm/min	± 0.03 nm
Baseline flatness, 200-800 nm, 200 mm/min, 1 nm step	< ±1 mAbs
Stray light, NaI (10g/l), 220 nm, 1.8 nm, 1 sec	< 0.03 %T
Linearity, 250 nm, 1.8 nm, 1 sec, r^2 >0.999	3.0 Abs
Photometric range	± 3.5 Abs
Photometric accuracy, 1 Abs NIST, 1 sec, 590 nm	± 3 mAbs
Photometric precision, 1 Abs NIST, 1 sec, 590 nm	± 0.5 mAbs

Noise (RMS) measured at 580 nm, 1 sec, ASTM E 685	Better than 30 µ Abs
Drift, 580 nm, 1.8 nm, 1 sec, after 2 hours warm-up	< 0.1 mAbs/h
Response time	0.02-5 sec
Light sources	Deuterium and Tungsten-Halogen lamps
Monochromator	High energy low stray light diffraction grating with 1300 lines/mm, 175 mm focal length
Dimensions	W 680 mm x D 565 mm x H 275 mm
Weight	35 Kg net
Mains Power	100/240VAC ±10% 50/60 Hz
Power Consumption	Max. 200 VA

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Sample Compartment

- 140 mm depth, 332 mm width, 162 mm height, with 120 mm beam separation.
- Total and easy access: front top and back covers are quickly removable.
- Three point positioning of accessories for high reproducibility of results.
- Quartz windows at the beam entrance and exit to the sample compartment prevent the optics from being contaminated.

Accessories

- Thermostatable standard cell holder directly useable with micro and ultramicro cells for small samples.
- Large family 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

- Operating temperature: 15 to 30°C.

Optical Design

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

Configuration requirements

- Pentium PC with 64 MB of RAM, 50 MB of free disk space, 1 free RS232 Port and Windows NT/2000 or XP as Operating System, Desktop Computer or Notebook.
- Optional printer: all standard Windows Printers.

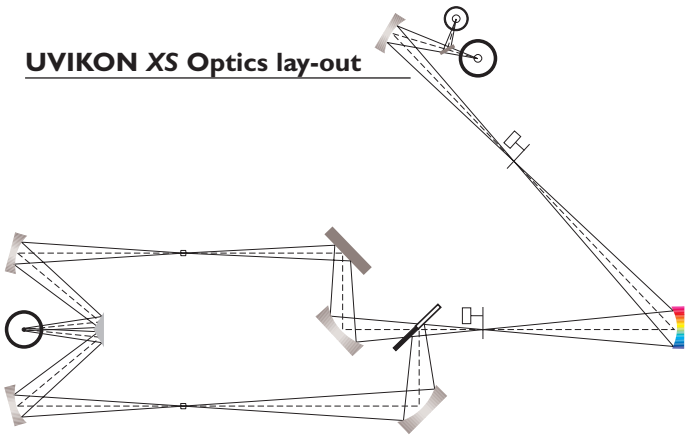
Ordering information

- 70/99-90289 UVIKON XS (CE)
- 70/99-90382 UVIKON XS (UL/CSA)

Includes LabPower Software Package*, standard thermostatable cell holder compatible with micro and ultra micro cells, accessory controller to allow connection of all UVIKON accessories

* Packages includes: LabPower software, DNA/RNA and validation applications.

UVIKON *XS* Optics lay-out



NorthStar Scientific

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