Technical Data



ScanDrop² Microvolume UV/Vis Spectrophotometer



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General

- Efficient and robust UV/Vis Spectrophotometer
- High flexibility through exchangeable adapters for various cuvettes including consumable-free microvolume measurements and 8-fold 10 mm sample changer
- Single sample or simple serial measurements
- Device opens in a rotation for optimal access and cleaning of the sample chamber
- PC or stand-alone operation through 10" tablet
- High-precision optics combined with a powerful xenon flash lamp

Optical System

Spectrometer type	Polychromator system with symmetric Czerny-Turner	
Detector	 Linear CCD detector optimized for UV/Vis range 	
Sample position	2D scanning range allowing adjustment to variable center heights (8.5 to 15 mm)	
Light source	Xenon flash lamp	

Technical Specifications

All data can be checked within the scope of the validation of the instrument as specified for the 10 mm standard cuvette. Further technical details of the applications and accessories are given in the "Individual Accessories Specification".

Measuring modes	Absorption, Transmission, Energy
Wavelength range	190 – 1,000 nm (0.5 nm steps)
Wavelength accuracy (360.9 nm)	± 1 nm
Wavelength reproducibility	± 0.05 nm
Spectral resolution capability	≥ 1.5 (A @ 269 nm / A @ 266 nm)
Toluene/Hexane at 20 − 30 °C	
Stray light (340 nm, NaNO ₂)	≤ 1%
Scanning speed	1.6 s per spectrum
Photometric reproducibility in	± 0.005
absorbance (546 nm, Hellma F4)	
Long-term stability in absorbance	± 0.01 1/h
(500 nm)	

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Application UV/Vis

	Standard cuvette	Butterfly Cuvette	CHIPCUVETTE 1.0 mm	CHIPCUVETTE 0.1 mm	CHIPCUVETTE 1.0 and 0.1 mm
Classification	Standard	Consumable free microvolume	Microvolume	Microvolume	Microvolume
Path length	Up to 10 mm	0.5 mm	1.0 mm	0.1 mm	1.0 and 0.1 mm
Number of samples	Up to 8	Up to 9	Up to 16	Up to 16	Up to 32
Volume	Up to 3.5 mL	2.0 – 4.0 μL	Min. 2.0 μL	Min. 0.3 μL	Min. 4.0 μL
Virtual dilution	-	1:20	1:10	1:100	1:10 and 1:100
Concentration range of DNA	2 – 125 ng/μL	15 – 1,500 ng/μL	10 – 750 ng/μL	100 – 7,500 ng/μL	10 - 7,500 ng/μL

Dimensions

Weight	Approx. 10 kg
Dimensions (W x H x L)	290 mm x 384 mm (incl. tablet PC) x 370 mm
Recommended footprint	290 mm x 370 mm

Additional Technical Data

Instrument operation conditions	$15~^{\circ}\text{C}$ to $35~^{\circ}\text{C}$, rel. humidity max. 90% (non-condensing) at $30~^{\circ}\text{C}$, max. $2,000~\text{m}$ NN		
Instrument electrical requirements	80 V – 264 V/AC, 50 – 60 Hz		
Fuses	2 x T3.15 A / 250 V		
Power consumption	Max. 30 W		
Noise emission	Max. 69 dB		
Warranty	2-years warranty on device system		
Technical standards	 Tested and designed to be compliant with the legal requirements for laboratory instrumentation and developed and produced in compliance with ISO 9001 ScanDrop² instruments are certified to comply with the requirements of EMC standards and bear the CE Mark 		

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Control and Data Evaluation

Control and analysis software	FlashSoftPro ² (PC) or FlashSoftPro touch (tablet)	
Control	PC or stand-alone (optional)	
Interface	 PC connection: USB 	
	Tablet: 2x USB for data transfer, barcode reader	
Computer requirements	 Operating system: Windows 7 (32 bit) or higher 	
	 Min. Pentium 4, 1 GB memory, min. 500 MB free hard disk capacity, USB 2.0, VGA graphic card (1280 x 1024) 	
Display	Optional: 10" tablet, color touch display, WIN 10 IoT	
Export function	Excel, *.csv, *.ods	
Quick start function	Yes	
Memory capacity	Not limited on PC	
Features	Preinstalled methods for easy access and operation	
	 Module for the incorporation of user-specific methods 	
	 Standards-based 	
	 Measurement values are automatically evaluated 	
	 Extensive spectral analysis 	

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