

Spectroquant® Pharo 100 and 300

The new spectrophotometer system
at a glance

Spectroquant® Pharo 100 For measurements in the VIS range

The Spectroquant® Pharo 100 spectrophotometer with a wavelength range of 320–1100 nm is suitable for use with all Spectroquant® test kits and combines the benefits of a system photometer with the multitude of possibilities offered by a spectrophotometer.

No matter whether you wish to program your own methods, measure concentrations or absorbances, record spectra or kinetic profiles, or make special multiwave-length measurements – all options are open to you now. In addition you can utilise the benefits of the Spectroquant® system photometers such as instrument-assisted analytical quality assurance (AQA) and bar code reading system for all of the available Spectroquant® tests.

Spectroquant® Pharo 300 For measurements in the UV/VIS range

The Spectroquant® Pharo 300 UV/VIS spectrophotometer with a wavelength range of 190–1100 nm offers all the advantages of the Pharo 100 as well as the possibility of performing measurements in the UV range.

Ordering information

Model	Wavelength range	Ordering number
Spectroquant® Spectrophotometer Pharo 100	320–1100 nm	1.00706.0001
Spectroquant® UV/VIS Spectrophotometer Pharo 300	190–1100 nm	1.00707.0001



Technical specification



	Spectroquant® Pharo 100	Spectroquant® Pharo 300
Wavelength range	320 - 1100 nm	190 - 1100 nm
Source lamp	Tungsten halogen lamp	Xenon flashlamp
Technology	Stabilized single-beam	
Measuring modes	Concentration, Absorbance, Transmission, Multi wavelengths, Scans + Kinetics in absorbance or transmission mode	
Spectral bandwidth	4 nm	
Wavelength resolution	1 nm	
Wavelength accuracy	± 1 nm	
Photometric range	± 3.3 A	
Absorbance resolution	0.001 A	
Absorbance accuracy	0.003 A at < 0.600 A 0.5 % of the reading for 0.600 ≤ A ≤ 2.000	
Scan	Scans in 1 nm increments with free selectable wavelength range	
Cells	16 mm round, 10/20/50 mm rectangular with automatic cell recognition	
Test recognition	Automatic bar code reading system for all Spectroquant® cell and reagent tests	
Display	Graphic display with background lighting	
Methods and profiles	Programmed methods of all Spectroquant® cell and reagent tests, 100 user-defined methods, 20 profiles for kinetic and absorption scans	
Method update	via Internet / PC or via USB-Stick	
Instrument-supported quality assurance	AQS 1: Instrument check using PhotoCheck and CertiPUR® UV/VIS standards AQS 2: System check using CombiCheck and/or CertiPUR® UV/VIS standards AQS 3: Testing samples for interferences by means of the MatrixCheck function	
Communication interfaces	1 USB-A, 1 USB-B, 1 RS 232	
Data storage	1000 single measured values; 4 MB for scans and kinetics i.e. approx. 100 scans (300 - 900 nm) and 400 kinetic curves with 150 single values each	
Languages	German, English, Spanish, French, Italian (please contact your Merck representative for availability of additional languages)	
Protection class	IP 31 and drain device for spilled cell contents	
Power supply	Country specific power supply, length of the connection cable: 2.5 m	
Power requirements	100 - 240 V~ / 50 - 60 Hz / 0.75 A	
Temperature	Operating: +10°C to +35°C, Storage: -25°C to +65°C	
Allowable relative humidity	Annual mean: ≤ 75%; 30 days/year: 95%; other days: 85%	
Dimensions	404 x 197 x 314 mm (width x height x depth)	
Weight (without plug-in power supply)	approx. 3.7 kg	
Accessories (from 2008)	Battery for portable use / automobile charging cable	

For further information

<http://photometry.merck.de>

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