

POP Series

UV-VIS SMART SPECTROPHOTOMETER



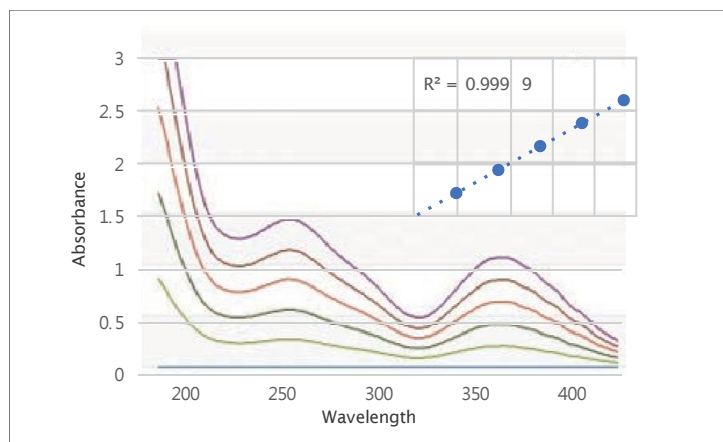
POP Series

POP chooses our unique high resolving power wavelength measurement mechanism.

The POP series is a single-beam UV-Vis spectrophotometer that offers stable performance, a compact footprint, and cost-effective operation. Depending on the specifications, the series is available in two models: POP and POP-V. It provides four measurement modes—Photometric, Quantitation, Spectrum, and Kinetics—allowing users to select the appropriate mode according to their analytical needs.



POP maintains excellent linearity over an absorbance range of 0–3 Abs, enabling accurate concentration determination through standard curve generation. Calibration using SRM 930a (0–100 mg/L) at 350 nm shows a high R^2 value, with a slope of 0.0107 consistent with the absorbance coefficient (ϵ_a).



User Experience

1. Intuitive graphical help for easy operation, even for beginners
2. Quick menu icons allow users to check and change cell type without entering measurement modes
3. Voice guidance with adjustable volume for experimental guidance

Efficiency

1. Favorite function for quick access to measurement data and analysis settings
2. Integrated multi-cell holder enables automatic measurement of multiple samples

Management

1. Instrument control and PC connectivity via dedicated VIEW software
2. Real-time monitoring of lamp warm-up status and cumulative usage time for optimal operation

D2 Lamp : 62.79 (Hour)
 W Lamp : 62.79 (Hour)
 Uptime : 0.04 (Hour)

⌚ White : before lamp warm up
 🟢 Green : after lamp warm up (1 hour)

Specifications		
Product Name	POP	POP-V
Photometrics System	Single-beam type	
Light Source(s)	Tungsten Halogen Lamp & Deuterium Lamp	Tungsten halogen Lamp
	(Built-in light source auto interchanging motor)	
Detector	Silicon Photodiode	
Spectral Bandwidth	< 1.8 nm	< 1.8 nm
Wavelength Range	190 to 1,100 nm	340 to 1,100 nm
Wavelength Display (setting)	0.1 nm	
Wavelength Accuracy	<± 0.5 nm	
Wavelength Repeatability	<± 0.1 nm	<± 0.2 nm
Slew Rate	7,800 nm/min	
Scanning Speed	4,000 nm/min	
Photometric Range	Absorbance : -3 A to 3 A / Transmittance : 0% to 300%	
Photometric Accuracy	<± 0.003 Abs at 0.5 Abs	<± 0.005 Abs at 0.0 to 0.5 Abs
	<± 0.005 Abs at 1.0 Abs	<± 1% Abs at 0.50 to 2.0 Abs
	(NIST SRM 930e)	(NIST SRM 930e)
Photometric Repeatability	± 0.003 Abs	
Baseline Stability	0.001 Abs/h (700 nm, one hour after light source)	<0.002 Abs/h (700 nm, after one hour warm-up)
Baseline Flatness	<0.001 Abs rms (200 to 1,100 nm, after one hour warm-up)	<0.003 Abs rms (340 to 1,050 nm, after one hour warm-up)
Stray Light	< 0.05 % (at 220 nm with 0.1% NaI)	< 0.05 % (at 340 nm with 0.5% NaNO2)
	< 0.05 % (at 340 nm with 0.5% NaNO2)	
RMS noise	< 0.0002 Abs rms (at 700 nm)	
Monochromator	Czerny-Turner Monochromator	
Standard Cell Holder	Multi-cell (8 cells)	
Lamp Interchange Wavelength	340 to 410 nm (Default 370 nm)	-
Operating System (OS)	Android	
Display	7-inch (Resolution: 1280 x 800)	
Control Options	Stand-alone PC	
Dimensions(W*D*H)	433 mm * 381 mm * 180 mm	
Power Requirement	AC 100-240V, 50/60Hz, 140VA	
Weight	10.5kg	
PC Software	(optional) View for Windows	

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