# **Cole-Parmer**<sup>®</sup>

## SP-300 Series Spectrophotometers

- UV and UV/VIS Spectrophotometers
- Easy to use
- Compact and lightweight with a small footprint
- Multiple mode choices and customizable features



### SP-300 Series Spectrophotometers

The four spectrophotometers in the SP-300 series range are models SP-300-VIS and SP-350-VIS which cover the visible region of the spectrum, and models SP-300-UV and SP-350UV which use a flash xenon lamp to extend the wavelength range into the UV region of the spectrum.

Basic models, SP-300-VIS and SP-300-UV, feature measurement modes, percent transmittance, absorbance and concentration. Advanced models, SP-350-VIS and SP-350-UV, include the basic features plus scanning, kinetics and quantitation.

#### Improved Optics

The SP-300 series models have improved optics resulting in a narrow spectral bandwidth of 5 nm and an absorbance range of -0.3 to 2.5 Abs.

- The SP-300-UV and SP-350-UV models use a 'press to read' xenon lamp to give more accurate readings and extend lamp life.
- The xenon lamp is covered by a 3 year warranty.
- The SP-300-VIS and SP-350-VIS models have a tungsten halogen lamp with a lamp save feature which enables the lamp to be turned off automatically after periods of inactivity.



Improved optics



Extended lamp life with PTR (press to read)

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Autologging capable

Easy USB data transfer (SP-350-VIS & SP-350-UV models)

## SP-300 Series Spectrophotometers



	SPECIFICATIONS					
	SP-300-VIS	SP-300-UV	SP-350-VIS	SP-350-UV		
Outputs	Analog, RS-232,	Analog, RS-232, Integral printer*		USB, Analog, RS-232, Integral printer*		
Size (Wx H x D)	27.5 x 22.0 x 40.0 cm (11.0 x 9.0 x 16.0*)					
Weight	6 kg (13 lb)					
	Wavelength					
Range	320 to 1,000 nm	198 to 1,000 nm	320 to 1,000 nm	198 to 1,000 nm		
Light source	Tungsten halogen lamp	Xenon lamp	Tungsten halogen lamp	Xenon lamp		
Resolution	1 nm					
Accuracy	±2 nm					
Repeatibility	±0.5 nm					
Spectral bandwidth	5 nm					
	Photometrics					
Transmittance	0 to 199.9%					
Absorbance	-0.300 to 2.500 A					
Accuracy	±1% T, ±0.01 Abs at 1.000 Absorbance					
Resolution	0.1% T, 0.001 A					
	Concentration					
Range	-300 to 9,999					
Resolution	Selectable 1, 0.1, 0.001					
Calibration	Blank with a single standard or factor					
Factor	0.001 to 10,000					
Standard	0.001 to 1,000					
Units	no units, %, ppm, EBC, SRM, mEq/L, mEq, M, mM, μM, nM, U, U/L, U/mL, g/L, mg/L, μg/L, ng/L, g/dL, mg/dL, μg/dL, mg/mL, μg/mL, ng/mL, μg/μL, ng/μL, mol/L, mmol/L					

## SP-300 Series Spectrophotometers



	EXCLUSIVE SPECIFICATIONS FOR SP-350-VIS AND SP-350-UV ADVANCED MODELS				
	Quantitation				
Range	-300 to 9,999				
Resolution	Selectable 1, 0.1, 0.01, 0.001				
Calibration	Blank with up to 6 standards				
Curve flt statistics	Quadratic, quadratic through zero, linear, linear through zero, interpolate				
	Kinetics				
Measurement time	2 to 9,999 seconds				
Calibration	Blank with a single standard or factor				
Resolution	Selectable 1, 0.1, 0.001				
Display	Graphical and concentration				
Analysis	Concentration, rate of change, initial and final absorbance or % transmittance				
	Spectrum				
Scan interval	Selectable 1, 2 or 5 nm				
Analysis	Absorbance or % transmittance and peak and valleys				
	Other				
GLP	Current time and date, user ID, instrument lock, and method lock				
Method storage	240				
Results storage	Limited by attached USB	Limited by attached USB			
Removable media	USB (supplied)				

	SP-300-VIS	SP-300-UV	SP-350-VIS	SP-350-UV
Wavelength range	320 to 1000 nm	198 to 1000 nm	320 to 1000 nm	198 to 1000 nm
Bandwidth	5 nm	5 nm	5 nm	5 nm
Percent Transmittance	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Absorbance mode	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
<b>Concentration mode</b>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Scanning mode	No	No	$\checkmark$	$\checkmark$
Kinetics mode	No	No	$\checkmark$	$\checkmark$
Quantitation mode	No	No	$\checkmark$	$\checkmark$
Lamp-Save feature	No	No	$\checkmark$	$\checkmark$
Tungsten lamp	$\checkmark$		$\checkmark$	
Press-to-read Xenon lamp		$\checkmark$		$\checkmark$

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