

# Cole-Parmer®

## SP-200 Series Spectrophotometers

- Multi-parameter display with wavelength and photometric readouts
- Easy and intuitive operation
- Entry-level single beam visible and UV/Visible non-scanning spectrophotometers ideal for routine analysis



# SP-200 Series Spectrophotometers

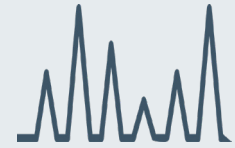
The SP-200 series spectrophotometers include model SP-200-VIS that covers the visible region of the spectrum, SP-250-VIS model with domed lid, and model SP-200-UV that uses a pulsed xenon lamp to extend the wavelength range into the UV region of the spectrum. All models have measurement modes for absorbance, percent transmittance and concentration. This makes the spectrophotometers ideal for basic photometric applications in schools and colleges, as well as in quality control laboratories.

## Key Features

- Multi-parameter display with wavelength and photometric readouts
- Small footprint
- Wide range of sampling accessories
- Domed lid of SP-250-VIS accepts tubes up to 105 mm
- SP-200-UV utilizes a high quality pulsed xenon lamp
- Easy and intuitive operation
- 3 year warranty

## Versatile and Flexible Accessories

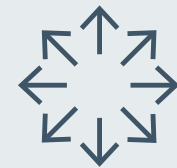
The SP-200 series has been specifically designed to accept a wide range of accessories. To accommodate various sample volumes, there is a wide range of passive accessories available including an adjustable cuvette holder which can hold cuvettes between 10 and 100 mm, a test tube holder for test tubes with diameters between 16 and 24 mm, and a micro-cuvette holder with a reduced aperture for small sample volumes. For multiple samples, we offer a four-position rotary cuvette holder.



Multiple measurement modes available



Push-button controls with simple user interface



Versatile and flexible accessories



Easy and intuitive operation

# SP-200 Series Spectrophotometers

## Temperature Control

Where temperature control is important, we offer a water heated cuvette option which requires a water bath and circulator (not supplied). For sampling applications, we offer an external sipper pump system which can be programmed to deliver controlled and reproducible sample volumes into the chamber of a flow-through cuvette, along with air and segmentation rinse cycles.

## Design

The SP-200 series spectrophotometers are small and lightweight, making them easy to store or move to different locations within the laboratory. These instruments are easy to navigate, using push buttons to move around the simple user interface.



## Technical Specifications

Model	SP-200-VIS	SP-250-VIS	SP-200-UV
Wavelength range	320 to 1000 nm	320 to 1000 nm	198 to 1000 nm
Wavelength resolution	1 nm	1 nm	1 nm
Wavelength accuracy	±2 nm	±2 nm	±2 nm
Spectral bandwidth	8 nm	8 nm	8 nm, 6 nm over UV range
Transmittance	0 to 199.9% T	0 to 199.9% T	0 to 199.9% T
Absorbance	-0.3 to 1.999 A	-0.3 to 1.999 A	-0.3 to 1.999 A
Accuracy	±1% T	±1% T	±1% T
Resolution	0.1% T, 0.001 A	0.1% T, 0.001 A	0.1% T, 0.001 A
Stray light	<0.5% T	<0.5% T	<0.5% T at 220 and 340 m

# SP-200 Series Spectrophotometers

## Technical Specifications (continued)

Model	SP-200-VIS	SP-250-VIS	SP-200-UV
Noise	<1%	<1%	<0.001 A at 0 A at 400 nm
Stability	1%/h after 15 minutes	1%/h after 15 minutes	<0.002 A/h after 30 minutes
Concentration range	-300 to 1999	-300 to 1999	-300 to 1999
Concentration resolution	0.1 to 1	0.1 to 1	0.1 to 1
Units	ppm, mg/L, g/L, M, %, blank	ppm, mg/L, g/L, M, %, blank	ppm, mg/L, g/L, M, %, blank
Factor	0 to 999.9, 1000 to 9999	0 to 999.9, 1000 to 9999	0 to 999.9, 1000 to 9999
Light source	Tungsten halogen lamp	Tungsten halogen lamp	Xenon lamp
Outputs	Analog and RS-232	Analog and RS-232	Analog and RS-232
Power	<50 W	<50 W	<50 W
Size (W x H x D):	36.5 x 16.0 x 27.2 cm (14.4 x 6.3 x 10.7")	26.2 x 11.4 x 19.3 cm (10.3 x 4.5 x 7.6")	36.5 x 16.0 x 27.2 cm (14.4 x 6.3 x 10.7")

## Ordering Information

Cole-Parmer model	Jenway model	Jenway legacy SKU	Item number
SP-200-VIS-115	6300 Visible Spectrophotometer - 110 VAC, 60 Hz	630531	<b>79000-64</b>
SP-200-VIS	6300 Visible Spectrophotometer - 230 VAC, 60 Hz	630501	<b>83054-05</b>
SP-250-VIS-115	6320D Visible Spectrophotometer with Domed Lid - 110 VAC, 60 Hz	632521	<b>83054-00</b>
SP-250-VIS	6320D Visible Spectrophotometer with Domed Lid - 230 VAC, 50 Hz	632501	<b>83054-07</b>
SP-200-UV-115	6305 UV-Visible Spectrophotometer - 115 VAC, 60 Hz	635031	<b>99968-69</b>
SP-200-UV	6305 UV-Visible Spectrophotometer - 230 VAC, 50 Hz	635001	<b>99968-68</b>



# SP-200 Series Spectrophotometers

## Accessories

Description	Jenway legacy SKU	Item number
4 position manual cuvette holder	634001	<b>79000-67</b>
Sipper pump, supplied with inlet and outlet tubing (230V/50Hz)	632001	<b>83061-20</b>
Sipper pump, supplied with inlet and outlet tubing (110V/60Hz)	632031	<b>83061-21</b>
10x10mm path length cuvette holder	630204	<b>83070-41</b>
10mm cuvette and 16/24mm test tube holder	637071	<b>83070-43</b>
10 to 100mm adjustable path length cuvette holder	630005	<b>83056-80</b>
Micro-cuvette holder	630304	<b>83056-82</b>
Water heated 10x10mm single cuvette holder	648001	<b>83058-99</b>
Dual cell holder for 10mm cuvettes and 12.7mm diameter tubes (6320D ONLY)	632511	<b>83070-45</b>
Storage/carry case (not for use with 6320D)	033290	<b>83061-24</b>
Dust cover	630028	<b>83054-70</b>
RS232 to USB converter for use with computer without a serial port	037551	<b>99959-79</b>
Interface cable kit	542009	<b>53020-52</b>

