

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

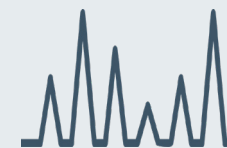
The SP-200 series spectrophotometers include model SP-200-VIS that covers the visible region of the spectrum, SP-250-VIS model with domed lid, and model SP-200-UV that uses a pulsed xenon lamp to extend the wavelength range into the UV region of the spectrum. All models have measurement modes for absorbance, 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

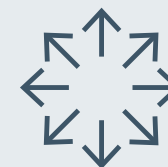
The SP-200 series has been specifically designed to accept a wide range of accessories. To accommodate various sample volumes, there is a wide range of passive accessories available including an adjustable cuvette holder which can hold cuvettes between 10 and 100 mm, a test tube holder for test tubes 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

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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	$\pm 1\%$ T	$\pm 1\%$ T	$\pm 1\%$ 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

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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	79000-64
SP-200-VIS	6300 Visible Spectrophotometer - 230 VAC, 60 Hz	630501	83054-05
SP-250-VIS-115	6320D Visible Spectrophotometer with Domed Lid - 110 VAC, 60 Hz	632521	83054-00
SP-250-VIS	6320D Visible Spectrophotometer with Domed Lid - 230 VAC, 50 Hz	632501	83054-07
SP-200-UV-115	6305 UV-Visible Spectrophotometer - 115 VAC, 60 Hz	635031	99968-69
SP-200-UV	6305 UV-Visible Spectrophotometer - 230 VAC, 50 Hz	635001	99968-68

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Accessories

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

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