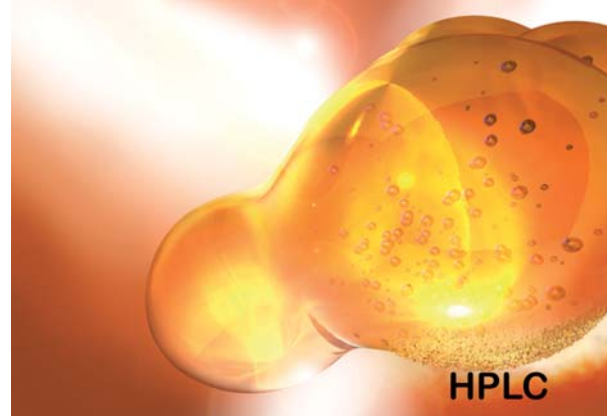


Specification Sheet

SPD-20A / SPD-20AV

UV/VIS Detector



	SPD-20A	SPD-20AV
Light source	Deuterium lamp	Deuterium lamp, tungsten lamp,
	mercury lamp (for wavelength accuracy check)	
Wavelength range	190 – 700 nm Cut-off filter to eliminate second-order diffraction is automatically activated for 371 - 700 nm range	190 – 900 nm 190 – 370 nm (D2 lamp) 371 – 900 nm (W lamp) Cut-off filter to eliminate second-order diffraction is automatically activated for 701 - 900 nm range
Spectral bandwidth	8 nm	
Wavelength accuracy	± 1 nm	
Wavelength reproducibility	± 0.1 nm ^{*1}	
Drift	1x10 ⁻⁴ AU/h max. (250 nm, room temperature constant, air in cell) 3x10 ⁻⁴ AU/h max. (250 nm, room temperature fluctuation less than 2°C, air in cell)	1x10 ⁻⁴ AU/h max. (250 nm, 600 nm, room temperature constant, air in cell) 3x10 ⁻⁴ AU/h max. (250 nm, 600 nm, room temperature fluctuation less than 2°C, air in cell)
Noise Level	± 0.25x10 ⁻⁵ AU max. (250 nm, air in the cell, equivalent to 2 sec time constant ^{*2})	± 0.25x10 ⁻⁵ AU max. (250 nm, 600 nm, air in the cell, equivalent to 2 sec time constant ^{*2})
Cell path length	10 mm	
Cell volume	12 µL	
Cell pressure tolerance	12 MPa	

*1 Reproducibility when the wavelength is changed after turning the power ON in single wavelength mode

*2 In single wavelength mode

Specification Sheet: SPD-20A/AV UV/VIS Detector (2/3)

Cell temperature input range	9 – 50°C, at 1°C steps	
Cell inlet, outlet tubing diameter	SUS316L tubing O.D. 0.8 mm x I.D. 0.25 mm	
Dual wavelength mode	Selectable, two wavelengths in 190 - 370 nm or 371 - 700 nm range	Selectable, two wavelengths in 190 - 370 nm, 371 - 700 nm or 701 - 900 nm range
	Sampling frequency 1.2 sec for one wavelength	
Response	11 steps selectable (corresponding to time constant 0.02, 0.05, 0.1, 0.5, 1.0, 1.5, 2.0, 3.0, 6.0, 8.0, 10.0 sec)	
Range	0.0001 – 2.56 AUFS (selectable in 0.0001 AUSF steps)	
Zero adjustment	Auto zero function, baseline shift function	
Polarity switching	Possible	
Wavelength scanning function	Performs wavelength scanning with flow stopped.	
	Wavelength steps	1 – 5 nm, selectable in 5 steps, 2 – 5 nm when W lamp is used
	Scanning speed	10 – 50 nm/sec, settable in 5 steps
	Spectrum plot output speed	1, 3, 10 nm/sec
Time Program	Available in detector or by system controller	
	Set items	Wavelength(s), auto zero, range, marker, response, wavelength scanning, event, polarity, lamp ON/OFF, loop, cell temperature, stop
	Number of steps	Maximum 32 steps (in detector program)
Output		
	For recorder	10 mV recorder connectors
	For integrator	6 steps: 0.5, 1, 1.25, 2, 2.5 and 4 AU/V Integrator output connectors output chromatogram in single wavelength mode or Ch 1 chromatogram in dual wavelength mode. Ratio chromatogram, spectrum and Ch 2 chromatogram are output from the recorder output connectors.

Specification Sheet: SPD-20A/AV UV/VIS Detector (3/3)

Lamp hour meter	Record up to 9999.9 hours
Wetted surface material	SUS316L, PFA, quartz
Operating temperature range	4 - 35°C
Power requirements	100/120/220-230 V AC, 160 VA, 50/60 Hz
Dimensions	W 260 x H 140 x D 420 mm
Weight:	13 kg