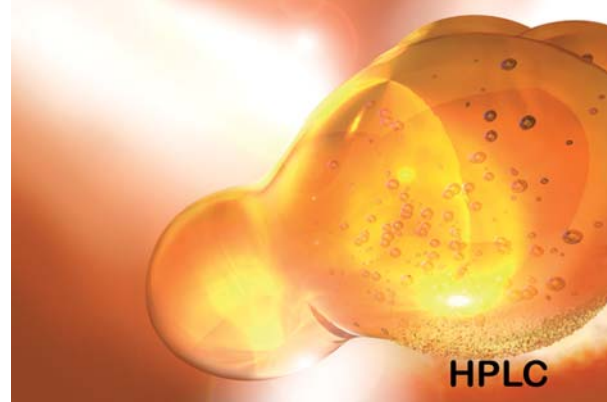


Specification Sheet

SPD-M20A

UV/VIS Photodiode Array Detector



Photodiode array elements	512 elements
Light source	Deuterium lamp, Tungsten lamp
Wavelength range	190 – 800 nm
Wavelength accuracy	± 1nm
Element resolution	1,2 nm / element
Slit width	1,2 nm (high resolution mode), 8 nm (high sensitivity mode)
Spectral resolution	≤ 1,4 nm (using 253,7 nm Hg emission line, 1,2 nm slit width)
Noise Level	± 0,3 x 10 ⁻⁵ AU ^{*1}
Drift	0,5 x 10 ⁻³ AU/h ^{*1}
Linearity	≥ 2 AU (ASTM standard)
Interface	Ethernet
Analogue output	4 channels
Analogue output range	0,5, 1, 1,25, 2, 4 AU/V (selectable)
Safety features	
Temperature sensor	100°C (lamp housing heat protection)
Temperature fuse	116°C (power supply circuit board protection)
Leak sensors	Leak detection
Lamp cover sensor	Lamp automatically extinguished if cover is removed (UV light protection, high voltage protection)
Operating conditions	4 – 35°C, 45 -85 % humidity, no condensation ^{*2}
Dimensions and weight	W 260 x H 140 x D 420 mm; 12 Kg
Power requirements	100/120/220-240 V AC, 150VA, 50/60Hz

*1 Drift/Noise measurement conditions:

Measured wavelength: 250 nm, 600 nm; Cell filled with air, time constant 2 sec, slit width 8 nm

Noise measurement: ASTM method (ASTM E 1657-98)

*2 Note that the ambient temperature and humidity range for the entire system may be limited by the specifications of the personal computer and printer.

Standard Flow Cell specifications

Optical path length	10 mm
Cell volume	10 μ l
Pressure resistance	12 MPa
Wetted surface materials	SUS316L, quartz glass, PFA
Inlet tubing	i.d. 0,25 mm x length 550mm
Outlet tubing	i.d. 0,25 mm x length 250mm
Cell temperature control	Yes
Cell temperature control settings	Off, 9 – 50°C (in 1°C steps), Set at ambient + 5°C
Cell temperature control precision	0,1°C

Note: For specific demands various optional flow cells are available.