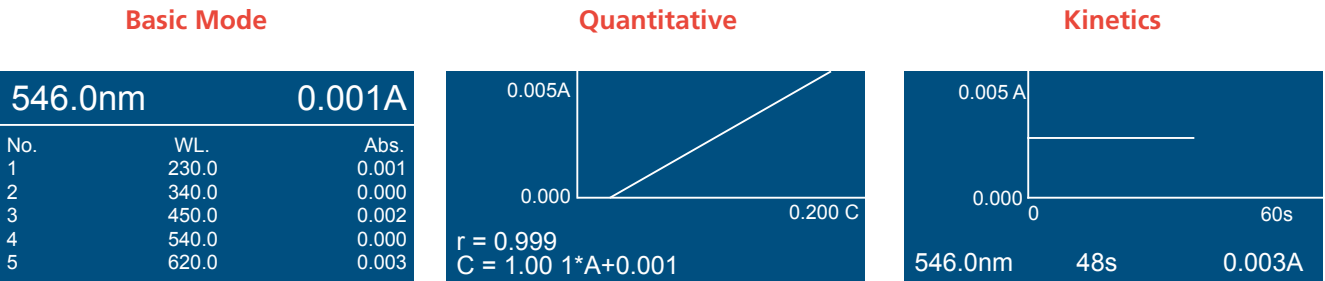# Spectrophotometer

Spectrophotometer
SP-V1000/SP-UV1000/SP-V1100/SP-UV1100

The spectrophotometer is an indispensable instrument routinely used in colleges, universities and research institutes for quantitative analysis in fields including biotechnology and quality control of new material developed. V Series provide high resolution, high performance and excellent stability.

Features:

- User Friendly Operation and Information Rich LCD Display. The large 128 x 64 dots, backlit LCD screen with adjustable brightness control displays a large array of data also in graphical format.
- On-Board Data Storage. The System can save the test results, up to 200 groups of data and 200 standard curves in the RAM memory.
- Data can be restored after a sudden power failure.
- Auto setting wavelength. To set wavelength automatically to calibrate the system through arrow keys to avoid operation errors.
- Tungsten & Deuterium lamps switching is automatic. Selectable from a wavelength range of 190 to 1100nm.
- PC control through application software. The spectrophotometer is fully equipped and capable of executing all functions in stand-alone mode. The optional application software Wave Professional provides computer control for the spectrophotometer (through the built-in USB port), apart from other functions such as spectrum scan, Time scan (kinetics), multi-wavelength scanning & Nucleic Acid /Protein measurement.(SPV1100/SPUV1100)
- Large sample compartment. To accommodate 5 – 100mm path length cuvettes with optional holders. A variety of optional accessories are available.

Basic Mode

546.0nm		0.001A
No.	WL.	Abs.
1	230.0	0.001
2	340.0	0.000
3	450.0	0.002
4	540.0	0.000
5	620.0	0.003

Quantitative

0.005A

0.000

0.200 C

$r = 0.999$
$C = 1.00\ 1*A+0.001$

Kinetics

0.005 A

0.000

0   60s

546.0nm	48s	0.003A

Model	SP-V1000	SP-UV1000	SP-V1100	SP-UV1100
Optical System	Single Beam	Single Beam	Single Beam	Single Beam
Light Source	Tungsten lamp	Tungsten lamp & Deuterium lamp	Tungsten lamp	Tungsten lamp &Deuterium lamp
Spectral Bandwidth	4.0nm	4.0nm	2.0nm	2.0nm
Wavelength Range	325~1000nm	200~1000nm	320~1100nm	190~1100nm
Wavelength Accuracy	±2nm	±2nm	±0.5nm	±0.5nm
Wavelength Repeatability	≤1nm	≤1nm	≤0.3nm	≤0.3nm
Photometric Range	-0.3 ~ 3.0 A, 0 ~ 200 %T	-0.3~3.0A, 0~200%T	-0.3~3.0A, 0~200 %T	-0.3 ~ 3.0 A, 0 ~ 200 %T
Photometric Accuracy	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5 %T @ 100 %T	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5 %T @ 100 %T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3 %T @ 100 %T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3 %T @ 100 %T
Photometric Repeatability	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25 %T @ 100 %T	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25 %T @ 100 %T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15 %T @ 100 %T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15 %T @ 100 %T
Stability	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)
Stray Light	≤0.2 @ 360 nm	≤0.2 @ 220 & 360 nm	≤0.05 @ 360 nm	≤0.05 @ 220 & 360 nm
Sample Compartment	4-position, 10mm path-length cuvette	4-position, 10mm pathlength cuvette	4-position, 10mm path-length cuvette	4-position, 10mm path-length cuvette
Display	LCD	LCD	LCD	LCD
Output	USB Port & Parallel Port (Printer)	USB Port & Parallel Port (Printer)	USB Port & Parallel Port (Printer)	USB Port & Parallel Port (Printer)
Power	110/220 V AC, 50/60 Hz, 80 W	110/220 V AC, 50/60 Hz, 120 W	110/220 V AC, 50/60 Hz, 80 W	110/220 V AC, 50/60 Hz, 120 W
Dimension(L×W×H)	490×360×210 mm	490×360×210 mm	490×360×210 mm	490×360×210 mm
Weight	10kg	12kg	10kg	12kg

Spectrophotometer | Accessories

Cat. No. 18900337
Micro Cell holder

Cat. No. 18900340
8-position auto cell changer
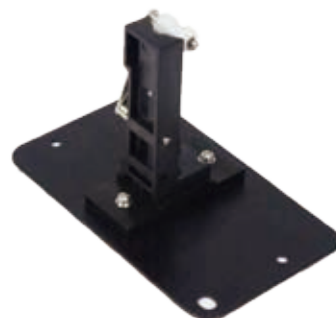(for SP-V1100&SP-UV1100)

Cat. No. 18900331
4-cell holder for 10mm squ.cuvette

Cat. No. 18900332
4-cell holder for 10mm
to 50mm squ. cuvette

Cat. No. 18900333
4-cell holder for up to
100mm squ.cuvette

Cat. No. 18900338
Test tube holder(ø8~ø22mm)

Cat. No. 18900334
cylindrical cell holder(ø16mm)

Cat. No. 18900339
solid sample holder
(ø1.5~3mmø1 position)

Cat. No. 18900335
10mm water-jacketed 1 cell holder
(for SP-V1100&SP-UV1100)

Cat. No. 18900336
10mm water-jacketed 4-cell holder
(for SP-V1100&SP-UV1100)

Square cuvettes glass/quartz
1~5mm/10~100mm

Cat. No. 18900341
12V20W halogen lamp

Cat. No. 18900342
Milas deuterium lamp,10V,300mA, 30W
(for SP-UV1000&SP-UV1100)