

New Model!

Specifications

Model	V-3000 V-3000PC	UV-3000 UV-3000PC	UV-3100 UV-3100PC	UV-3200PC	UV-3200PCS	UV-3300PC
Wavelength Range(nm)	320-1100		190-1100			
Spectral Bandwidth	4nm		2nm	1.8nm	0.5/1/2 4/5nm	1nm
Optical System	Single Beam, Grating 1200 lines/mm					
Wavelength Accuracy	±0.5nm		±0.3nm			
Wavelength Repeatability	0.3nm		0.2nm			
Scan Speed	Hi, MED., LOW., MAX. 3000nm/min					
Photometric Accuracy	±±0.5%T or ±0.005A@1A					
Photometric Range	0-200%T, -0.3 - 3A, 0-9999Conc					
Stray Light	0.05%T@220, 340nm					
Stability	±0.002A/h @500nm					
Display	5 inches LCD (320*240 dots)					
Baseline Flatness	±0.002A (200-1000nm)					
Standard Cell Holder	Standard 10mm pathlength cuvette					
Light Source	Tungsten lamp	Tungsten & Deuterium lamp (Pre-aligned)				
Output	USB Type A port for USB memory device (Right side)					
	USB Type B port for optional computer connectivity (Back)					
	Parallel port for printer					
Power Requirement	AC 110/220V 50/60Hz					
Dimensions(L*W*H)	491*365*180mm			579*428*198mm		
Weight	14kg			20kg		

UV/V-3xxx Series is an advanced single beam design consisting of 9 models. They differ in bandwidth and wavelength accuracy, but provide excellent performance for measurements.

They are suitable for clinical, pharmaceutical, and bio-chemical lab applications, as well as routine applications such as quantitative analysis, kinetics, Wavelength Scan, Multi-Wavelength, and DNA/Protein analysis. The memory is 32K.

UV-Vis Analyst software Based Microsoft Windows makes these instruments versatile. All instruments provide excellent performance for measurements.

They are divided into in two types: PC models and stand-alone models.

1. In Stand-alone models, all software methods are included as built-in standard; this eliminates the need of software.
2. Online software update via internet.
3. Data can be downloaded.
4. The PC models come standard with Windows® based application software UV-Vis Analyst.

Features

1. Fixed or variable slits (Bandwidths).
2. Sealed, solvent-resistant tactile keypad with alpha-numeric entry for file names and units.
3. Pre-aligned deuterium lamp for easy lamp replacement. The status of the lamps may be monitored.
4. Powerful built-in program or PC Windows® based software UV-Vis Analyst including sophisticated utility programs.
5. Data Download-to-PC software for stand-alone models (Optional).
6. Real-time clock for date and time stamping of results.
7. Data can be saved by USB memory device directly.



Mapada UV/V-3xxx Scanning Spectrophotometer

UV/V-3xxx Series Local Control Software

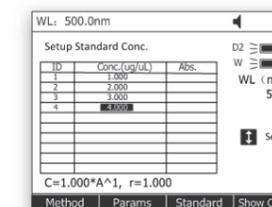
All methods are included as built-in standard; this eliminates the need of software. Online software update via internet.

The local control software includes functions such as: Photometry, Quantitative, Wavelength Scan, Kinetics, DNA/Protein, Multi-wavelength and System Utilities.



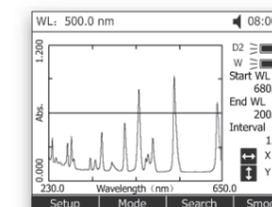
Standard Curve

Up to 10 standard solutions may be used to establish calibration equation curve. There is a choice of four methods for fitting a curve through the calibration points: Linear fit, Linear fit through zero, square fit and cubic fit.



Wavelength Scan

The Wavelength Scan intervals are 0.1, 0.2, 0.5, 1, 2, 5nm, and High, Medium and Low scan speeds are available. Scan speeds vary from 100 to 2000 nm/min. Wavelengths are scanned from high to low so that the instrument stand by at high wavelength. This minimizes the degradation of UV sensitive samples. Precise control of filter and lamp changes means that their effects are not seen on the final scan. Post-run manipulation includes re-scaling axes, curve tracking and peak picking.

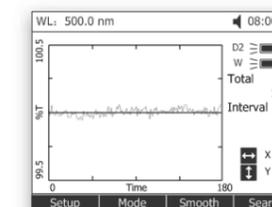


Kinetics

This mode may be used for scanning time course or reacting rate calculations. Abs. vs. time graphs is displayed on the screen in real time.

Wait time and measurement time up to 12 hours may be entered with time intervals of 0.5, 1, 2.5, 10, 30, seconds and 1 min.

Post-run manipulation includes re-scaling, curve tracking and selection of the part of the curve required for the rate calculation. Rate is calculated using a linear regression algorithm before multiplying by the entered factor.



Multi-Wavelength

Up to 10 wavelengths may be entered, allowing the measurement of multiple wavelengths on a series of Samples.

No	WL(nm)	Abs
1	200.0	2.292
2	300.0	2.125
3	400.0	2.024

DNA/Protein Test (Only for UV-3xxx)

Concentration and DNA purity are calculated by Absorbance ratios 260nm/280nm or 260nm/230nm with optional subtracted absorbance at 320nm

DNA Concentration=62.9*A₂₆₀-36.0*A₂₈₀

Or 49.1*A₂₆₀-3.48*A₂₃₀

Protein Concentration=1552*A₂₆₀-757.3*A₂₈₀

Or 183*A₂₆₀-75.8*A₂₃₀

Other wavelengths and factors may be entered.

No	Items	Result	Unit
1	A1	0.251	Abs
2	A2	0.243	Abs
3	Aref	0.005	Abs
4	C-DNA	4.524	ug/UL
5	C-Pro	110.8	ug/UL
6	Purity	1.009	