

Ultraviolet and visible range spectrophotometers "UV-2005" and "UV-3100"

AUTOMATIC WALVELENGTH POSITIONING AND BLANK SETTING



APPLICATIONS

Suitable for pharmaceutical and biochemical laboratories, kinetics, quantitative analysis, wavelength scanning, multiple components and DNA/protein analysis.

COMMON FEATURES

Spectrophotometers UV-2005 and UV-3100 have been developed for accurate tests; Its stray light is only of 0.05% T. They are flexible, easy-to-use and maximize value. Value is provided from every day perfomance. The independent local software provides the following functions: Basic Mode, Quantitative Test, Kinetics and System Utilities.

Data is stored in the memory in case of power cut.

The Special application software provides a complete control of the spectrophotometer from a PC, through the built-in USB port.

Wavelength scanning models can be upgraded when connected to the PC via the special software based in Windows $^{\circledR}$.

Automatic wavelength settings.

Halogen and deuterium lamps can be switch on/off individually to extend lamp lifetime. Its pre-aligned design makes it possible to change lamps for the user himself.

Large sample compartment for 5-100mm path length cuvettes, with optional holders. A wide range of optional accessories can also be selected.

UV-2005 MODEL

Large LCD screen (128x64bits).

It can display a total of 200 groups of data (5 groups per screen).

It can display standard curve and kinetics curve graphic.

The system can also save the test results.

A total of 200 data groups and 200 standard curves can be saved in the RAM memory.

UV-3100 MODEL

Absorbance, transmittance and concentration measurements.

It establishes or uses stored calibration equations to measure solutions of unknown concentration.

Spectrum scan of sample at any selected wavelength range with choice of scanning speed and wavelength interval.

Measurement of absorbance changing versus time with reaction rate calculation function.

Measurement at multiple wavelengths to analyse and determine the composition of the mixtures.

Calculation of concentration and DNA purity.

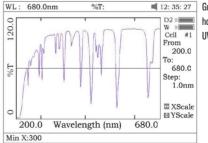
Note: ratio at other wavelengths can be measured.

ACCESSORIES

(see page 241).



MODELS	UV-2005	UV-3100			
Part No.	4120020	4120021			
Wavelength range	190-1100 nm				
Spectral bandwidth	:	2 nm			
Optical system	Single beam, diffractio	n grating 1200 lines/nm			
Wavelength accuracy	±l	±0,5 nm			
Wavelength repeatability	0	,3 nm			
Photometric accuracy	±0,3% T				
Photometric repeatability	±0,2% T				
Photometric range	-0,3-3 A, 0-200% T. (-0,3-3 A, 0-200% T. 0-9999 Concentration			
Stray light	0,05% T @	0,05% T @220 nm, 340 nm			
Stability	± 0,002 A	± 0,002 A/h @ 500 nm			
LCD Display	Graphic(128x64)	Graphic(320x240)			
Scanning velocity	- High,Med	, Low.Max 3000 nm/min.			
Uniformity	-	± 0,002 A (200-1000nm)			
Sample compartment 1	Omm path length standard o	cuvette (100mm optional)			
Light source	Halogen and deuterium lamps (pre-aligned)				
Output	USB, paralle	USB, parallel port (printer)			
Power requirements	220 V / 50Hz AC or 110 V / 60 Hz AC				
External dimensions (HxWxD)	180 x 470 x 370 mm	160 x 480 x 360 mm			
Weight (Kg)	14	16			



Graphic display visualized detail of holmium crystal scanning, from a UV3100 spectrophotometer.

SPARE PARTS	UV-2005	UV-3100
Halogen lamp (visible)	431	2007
Deuterium lamp (UV)	431	2006

ACCESSORIES

Thermostatted flow Peltier cuvette holder (only compatible with UV-2005 and UV-3100 models)

Temperature range: from 15 °C. to 40 °C. in steps of 0.1 °C (ambient temperature \pm 22°C.)

Precision: ± 0,2 °C.

Sample suction volume: 1, 2, 3, 4, 5, 7.5, 10, 12.5, y 15 ml/min.

LCD Display: 128x64 pixels.

Model

Pa	art No.	Height / Width / Depth (controller) cm	Height / Width / Depth (cuvette holder) cm	Power W	Weight Kg
41	120018	11,5 27 17	10 12 7	30	3,5

Cuvette holder

For long cuvettes, pathlength between 1 and 50 nm. Part No. 4120030 For path leength100 mm. cuvettes. Part No. 4120031

Test tubes holder

For tubes from 10 to 20 mm. Ø Part No. 4120032

Ink printer (not thermal). Paper 2 1/4" (56 mm) wide roll. Includes power transformer and interface cables. (5V-3A)

Model

Part No.	Height / Width / Depth cm	Weight Kg
4120117	4 16 10	1





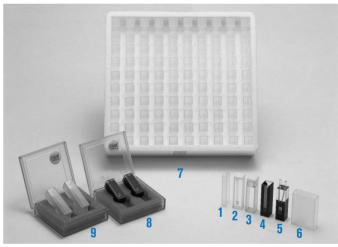






FEATURES

Range of polystyrene, glass and quartz cuvettes. Standard size pathlength 10mm x 45mm high. Special cuvette pathlength 40mm x 45 mm high (fig 6). Special cuvette pathlength 4mm x 45 mm high (fig 1).



MODELS

Standard cuvettes	1				
Part No.	Figure	Material	Optical path length	Description	Presentation
5100020	9	Quartz	10 mm	Standard square, "macro"	Pack of 2 units
5100021	9	Glass	10 mm	Standard square, "macro"	Pack of 2 units
5100022	7	Polystyrene	10 mm	Standard square, "macro", disposable	Box of 100 units
5100025	8	Glass	10 mm	Flow through cell, square "micro"	Pack of 2 units

Special cuvettes					
Part No.	Figure	Material	Optical path length	Description	Presentation
5100014	6	Glass	40 mm	Rectangular	Pack of 1 unit
5100015	5	Glass	10 mm	Flow through cell. Window 5 x 10 mm	Pack of 1 unit
5100016	4	Glass	10 mm	Standard square, "micro"	Pack of 1 unit
5100017	3	Glass	10 mm	Standard square, "macro" with round lid	Pack of 1 unit
5100018	2	Quartz	10 mm	Semi-micro	Pack of 2 units
5100019	2	Glass	10 mm	Semi-micro	Pack of 2 units
5100023	7	Polystyrene	10 mm	Square Semi-Micro, disposable	Box of 100 units
5100024	1	Glass	5 mm	Square Semi-Micro	Pack of 1 unit

