



## Visible range spectrophotometers "V-1100" and "VR-2000"

"V-1100" MODEL WITH MANUAL WAVELENGTH SETTINGS AND AUTOMATIC BLANK.

"VR-2000" MODEL WITH AUTOMATIC WAVELENGTH SETTINGS AND BLANK.



"V-1100" Part no. 4120025

"VR-2000" Part no. 4120026

### APPLICATIONS

They are widely used in colleges and enterprises for general quantitative analysis and experiments based in absorbance measurements.

### COMMON FEATURES

High quality silicon photometric diode detector and 1200 lines/mm diffraction grating ensure the high quality accuracy and precision.

Digital display for an easy readout.

Automatic zero and blank (easy to use). Easy switching of transmittance, absorbance and concentration modes, just by pressing one key.

Large sample compartment, which can accommodate 5 to 100mm path length cuvettes with optional holders.

Its pre-aligned design makes it possible to change the halogen lamps by the user himself.

### Optional:

Optional software based on Windows® which can expand the applications to standard curve and kinetics.

### V-1100 MODEL

Easy of use.

Ergonomic and solid design for a continuous suitable use, for students and workers.

### VR-2000 MODEL

Large LCD screen (128x64bits).

It can display a total of 50 groups of data (3 groups per screen).

It can display standard curve and kinetics curve graphic.

The system can also save the test results.

A total of 50 data groups and 10 standard curves can be saved in the RAM memory.

At most 9 standard samples can be used to establish a standard curve.

The curve and the curve equation will be displayed simultaneously on the screen. The unknown concentration solutions, can be measured by the curve.

If one knows the coefficient  $k$  and  $b$  of the formula:  $C=kA+b$ , one can input the value directly.

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

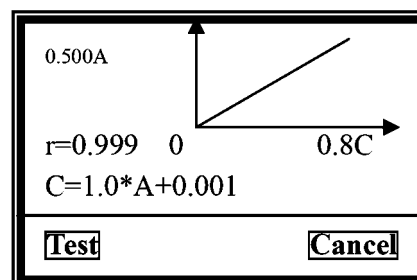
### ACCESSORIES

Professional software. Part No. 4312001

(see page 241).

MODEL	V-1100	VR-2000
Part No.	4120025	4120026
Wavelength range	325-1000 nm	
Spectral bandwidth	5 nm	4 nm
Optical system	Single beam, diffraction grating 1200 lines/mm	
Wavelength adjustment	Manual	Automatic
Wavelength accuracy	±2 nm	±1 nm
Wavelength repeatability	1 nm	0,5 nm
Photometric accuracy	±0,3% T	±0,5% T
Photometric repeatability	±0,3% T	
Photometric range	-0,3-3 A, 0-200% T. 0-9999 Concentration	
Stray light	0,5% T	0,3% T
Stability	± 0,004 A/h @ 500 nm	± 0,002 A/h @ 500 nm
LCD Display	3,5 Digits	128x64 pixels
Detector	Silicon	
Sample compartment	10 mm path length standard cuvette (100mm optional)	
Light source	Tungsten lamp	
Output	USB, Parallel port (printer)	
Mains supply	220 V / 50Hz AC or 110 V / 60 Hz AC	
External dimensions (HxWxD)	160 x 480 x 360 mm	180 x 470 x 370 mm
Weight (Kg)	8	12

SPARE	V-1100	VR-2000
Halogen lamp (visible)	4312004	4312007



Graphic display visualized detail of a regression line for concentration calculation. (VR-2000)