

The M105 Student Visible Spectrophotometer



This robustly built spectrophotometer combines a surprisingly high level of performance with a budget price. Wavelength is conveniently set using the rotary control and the instrument is ready for use within just a few minutes from switch-on. A membrane keyboard positioned next to the large, clear LCD display allows the operator to rapidly switch between %T and Absorbance and to set Zero Abs. The narrow 12nm bandpass is ideally matched to the wavelength range of 335 to 1000nm.

The remarkable stability and accuracy of the instrument will be welcomed by quality control and teaching laboratories. The sample compartment accepts either standard 10mm rectangular cuvettes, including disposable semi-micro cuvettes, or test-tubes, and the RS232 output provides a convenient link to a digital printer for hardcopy or a PC. A low-cost application program, which runs under Windows 9x includes the facility to create calibration curves on screen.

Technical Specifications

Display	Digital L.C.D.
Light source	Tungsten-Halogen
Monochromator	1200 lines/mm grating
Detectors	Silicon Photodiode
Wavelength Range	325 - 1000nm
Wavelength Accuracy	± 2 nm
Wavelength Resolution	
Wavelength Repeatability	± 1 nm
Noise	< 0.001A @ 500nm at 0A
Zero Drift	< 0.003A per hour after warm-up
Baseline Flatness	
Bandpass	12nm
Stray Light	<0.1%T @ 340 nm
Photometric Accuracy	+/- 1% 0-1 A
Photometric Range	-1 to 2.5A, 0-125%T and -9999C and +9999C
Printer Interface	RS 232 for printer or PC
Computer Interface	Bi-directional RS232C for PC control
Power Requirements	110/120V, 220/230V, 50/60 Hz, 60VA
Dimensions	408 x 308 x 185mm packed 645 x 535 x 370mm
Weight	6Kg packed 9Kg