Model 4255/50 is the most sophisticated and complete equipment within the Zuzi spectrophotometers series 4200 thanks to it built-in software that allows performing any kind of analysis directly from the equipment (quantitative, kinetics, scan, etc.) thus being of wide application in clinical and research laboratories. With excellent features it presents only 0.05 % stray light and a band width of 2 nm which assure accurate and precise readings.

Features

1| Large easy-to-read LCD display (128x64 bits) that shows the different results as well as the concentration curves and their equations and the kinetics and scan curves in real time.
2| Memory to save data and curves. Alpha-numeric equipad to input file name.
3| Clock and calendar to date results.
4| Precise wavelength setting by using the keyboard with a resolution of 0.1 nm.
5| Halogen and deuterium lamps can be turned on/off independently to extend their lifetime. Display and reset of the usage time of lamps.
6| Sample compartment with external manual exchanger that can hold up to 4 cells of 10 mm path length.
7| Optional: Application software based on Windows® that provides a complete control of the spectrophotometer functions from a computer.

Working modes

1| Basic: absorbance and transmittance measurements at a certain wavelength and basic quantitative mode..
2| Quantitative: determination of the concentration of different samples by using linear, quadratic or cubic equation curves. Possibility of inputting the value of coefficients or up to 10 standard samples can be used to set the curve equation.
3| Wavelength scan: scan speed (high, medium or low) and interval (0.1, 0.2, 0.5, 1, 2 or 5 nm) can be selected. Scan is performed from high to low wavelength to minimize degradation of UV sensitive samples. Post-run processing includes curve tracking and peak picking.
4| Kinetics: time course scanning and reaction rate calculations with possibility of programming the delay time, total time (up to 12 h) and interval time (0.5, 1, 2, 5, 10, 30 or 60 s). Post-run processing includes curve tracking and selection of the region of the curve required for rate calculations.
5| DNA/Proteins: nucleic acid concentration and purity calculations. Absorbance ratios 260 nm/280 nm or 260nm/230nm, with optional substractive absorbance at 320 nm.
6| Multi-wavelength: measurement of multiple wavelengths (up to 10 different wavelengths) to analyze and determine the composition of mixtures.
7| Software UV/Vis Analyst (CODE: HJH009)

Technical specifications

Code	HJD004
Model	4255/50
Wavelength range	190-1100 nm
Band width	2 nm
Optical system	Single beam, grating 1200 lines/mm
Wavelength accuracy	±0.5 nm
Wavelength repeatability	0.3 nm
Wavelength resolution	±0.1 nm
Scan speed	High, medium, low (max. 3000 nm/min)
Photometric range	-0.3/3 A, 0-200 %T
Photometric accuracy	±0.3 %T
Photometric repeatability	± 0.2 %T
Stray light	0.05 %T
Stability	±0.002 A/h
Baseline flatness	±0.002 A (200-1000 nm)
Lamps	Halogen and deuterium (pre-aligned)
Detector	Silicon photodiode
Sample compartment	4 standard cells of 10 mm path length
Outputs	USB port and parallel port (printer)
Power	AC 220V/50Hz or AC 110V/50HZ
Dimensions	480x360x160 mm
Weight	16 Kg