

High end spectrophotometer especially suitable for Molecular Biology or Biochemistry laboratories since it allows qualitative (absorbance and transmittance measurements), quantitative (concentration measurements) and kinetics analysis in the UV-visible range. 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 curves in real time.
- 2| Memory to save up to 200 groups of data. The memory can also store and reload up to 200 different standard curves being ideal in assays with samples of the same nature and speeding up daily lab work.
- 3| Precise wavelength setting by using the keyboard with a resolution of 0.1 nm.
- 4| Data can be restored after a sudden power cut.
- 5| Tungsten and deuterium lamps (model 4211/50) can be turned on/off independently to extend their lifetime
- 6| Sample compartment with external manual exchanger that can hold up to 4 cells of 10 mm path length.
- 7| Application software that provides a complete control of the spectrophotometer functions from a computer and allows performing scanning, multi-wavelength and DNA/protein analysis.

### — Functions

- 1| Basic mode: absorbance and transmittance measurements at a certain wavelength.
- 2| Quantitative mode: determination of the concentration of different samples from a curve equation ( $C=k \cdot A+b$ ). Two methods:
  - a| Coeficiente: el valor de los coeficientes k y b de la ecuación se introducen directamente a través del teclado.
  - b| Curva estándar: permite utilizar hasta 9 muestras patrón para establecer la ecuación de la curva estándar.
- 3| Modo cinética: para análisis a lo largo del tiempo y cálculo de velocidad de reacciones enzimáticas con posibilidad de programar el tiempo total del análisis y el intervalo de tiempo entre una medición y la siguiente.

### — Technical specifications

Code	HJD003
Model	4251/50
Wavelength range	190-1100 nm
Band width	2 nm
Optical system	Single beam, grating 1200 lines/mm
Wavelength accuracy	± 0.5nm
Wavelength repeatability	0.3 nm
Wavelength resolution	± 0.1 nm
Photometric range	-0.3/3 A, 0-200 %T
Photometric accuracy	± 0.3 %T
Photometric repeatability	± 0.2 %T
Stray light	0.05 %T at 220 nm, 340 nm
Stability	± 0.002 A/h a 500 nm
Lamps	Tungsten and deuterium
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	470x370x180 mm
Weight	14 Kg