



spectrophotometer  
touch screen  
4481/1  
ZUZI

## Spectrophotomètre écran tactile, modèle 4481/1

We introduce the new and novel UV-VIS spectrophotometer 4481/1 extending our current range of UV-Vis spectrophotometry high end. This new model incorporates as a novelty, and among its many benefits, an innovative touch interface, which allows the user to manage equipment in an easy and intuitive way.

Using most advanced and complete working functions available, allows precise and reliable test of qualitative analysis and / or quantitative samples, suited to wide range of sectors, such as pharmaceutical and petrochemical industry, sanitary sector for health test and clinical trials, environmental protection, food safety and quality control or research studies in universities or schools.





One of highlight features is the complete automatic control system of operation parameters; this system definitely provides efficiency, speed and accuracy on results and optimizes internal processes:

- [01] Self-test of working status and functioning
- [02] Automatic wavelength calibration
- [03] Automatic wavelength positioning (WL)
- [04] Automatic filters switching
- [05] Display and printing of spectrum and data
- [06] Drawing and printing of spectrum graph and data
- [07] Automatic searching of optimal energy point of light source
- [08] Error message indication

# touch spectrophotometer: equipment parts

1  
Large color touch screen 7 " LCD (153x85 mm)

2  
Motorised automatic 8-cells holder for 10 mm path-length cells



[2] Connections / external outputs: 1 Ethernet, 2 USB and parallel port output 25 pins

2.1 On/Off switch



2.2

Parallel port

2.5

Shucko connection

2.4

2 USB external output

2.3

Ethernet connection

[2] Motorised automatic 8-cells holder for 10 mm path-length cells



## touch spectrophotometer: features chart



Code	HJD006
Beam	Simple
Screen	Touch
Scanning	Yes (Scanning speed 500 nm/min in steps of 1 nm)
Wavelength range	190 - 1100 nm
Bandwidth	2 nm
Accuracy	± 0.5 nm
Repeatability	≤ 0.2 nm
Range Abs-T	-0.301 - 4.000 Abs 0.0 – 200.0 %T
Photometric accuracy	± 0.002 Abs (0.0-0.5 Abs) ± 0.004 Abs (0.5-1.0 Abs) ± 0.3 %T (0-100 %T)
Photometric reproducibility	≤ 0.001 Abs (0.0-0.5 Abs) ≤ 0.002 Abs (0.5-1.0 Abs) ≤ 0.15 %T (0-100 %T)
Stray light	≤0.03%T (at 220nm NaI and 340nm NaNO <sub>2</sub> )
Base line	±0.002A (200-1090 nm)
Noise	100% (T) ≤ 0.15% (T) 0% (T) ≤ 0.1% (T)
Drift	≤0.0009A/0.5h (a 250nm y 500nm tras 2hrs de trabajo)
Light source	Tungsten lamp: 12V20W / Deuterium lamp: DD2.5
Power source	AC220V±22V, 50Hz±1Hz
Dimensions	550mm×430mm×200mm

## touch spectrophotometer: types of analysis

Below, all types of analysis, testing and processing data provided by the equipment:

- [01] Photometric measurement
- [02] Quantitative analysis
- [03] Chemical kinetic analysis
- [04] Multi-wavelength determination
- [05] Spectrum scanning
- [06] Zoom in/out of spectrum graph, saving and recalling of curve
- [07] Calibration, search and printing of peak value

For further analysis and data processing, the spectrophotometer provides a large memory capacity (10 concentration curves, 10 spectrum scanning curves and 10 kinetic curves) with storage of tested data, graphic scanning data obtained, regression equations derived by the system and data correction.

After development of information, and by connection to printer, you can export the data tested, print curves designed from spectrum scanning, graphic scanning fixed wavelength vs time and linear regressions obtained, among others.

In turn, through an USB port, spectrophotometer can be connected to a PC using the UVWin8 software (not included), so you can operate instrument from computer and enjoy new features, among which stands out the program analysis pre-determined DNA / protein.

## touch spectrophotometer: ACCESSORIES

Code	Description
HJH020	Software UVWin8
HJH021	Tungsten lamp, 12V20W
HJH024	Deuterium lamp, DD2.5