



Spectrophotometer UV/Vis, Split beam, Xenon lamp, 2nm

Code HJD015 | Model 4510/5

- 1200 l/mm holographic grating with low stray light and optimised split-beam optical system design ensure greater accuracy.
- Increased strength and durability due to cast aluminium base and moulded plastic housing.
- Improved wavelength accuracy and repeatability and noise reduction due to the new (patented) wavelength control mechanism.
- External tablet (10.1" IPS colour LCD touch screen) provides excellent viewing effect and easy operation.
- Self-calibration and warm-up on start-up.
- Powerful measurement and analysis functions and open self-defined measurement methods can meet the measurement requirements of scientific research.
- The software (UVstudio) has GLP/GMP functions, which can effectively track and manage instrument performance and measurement data.
- File management function.
- Available IQ / OQ / PQ protocols



Reference	HJD015
Model	4510/5
Optical system	Split beam, 1200 lines / mm grid
Wavelength range	190-1100 nm
Wavelength accuracy	±0,3 nm
Wavelength repeatability	≤0,1 nm
Wavelength display	0,1 nm
Wavelength swing speed	10000 nm / min
Wavelength scanning speed	20-3200 nm / min
Light source	Flashing Xenon lamp
Spectral bandwidth	2 nm
Modes	Photometry, Quantitation, Spectrum, Kinetics, Time scanning, Multi Wavelength, DNA/Protein, Custom
Detector	Dual silicon photodiode
Photometric range	-0,3-3 A, 0-200 %T, 0-9999.9 C
Sample holder	For 4 x 10 mm cuvettes
Display	IPS colour capacitive touchscreen, 10,1 inch
Storage	64 GB, unlimited (USB storage, SD card, network storage)
Interface	1x RS232 serial port (printer), 1x USB-B (PC), 1x USB-A (USB memory stick), Bluetooth, 1x HUB 3+1 USB 3.0 + 1 Type C
Power	100-240 VAC, 50/60 Hz, 80 W
Dimensions (LxWxA)	450x370x187 mm
Weight	10.2 kg



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Functions

Photometry

- A / %T conversion
- Custom coefficient

Multi Wavelength

- Measure up to 20 wavelengths at a time
- Customize formulas for data calculation
- User-selectable one-point measurement times (1-50)
- Parameters can be saved and loaded
- Results can be recorded, renamed, deleted, saved, printed, and exported (in Excel, Word, PDF, etc.)
- Customize report layouts.

Time scanning

- Unlimited scanning time
- Scan interval can be customized
- Point by point (peak) view, mark and select
- Adaptive coordinates and a variety of ways to modify coordinates
- Curves and data can be deleted, saved, printed, and exported (in Excel, Word, PDF, etc.)
- Curves can be saved and printed automatically

Kinetics

- Unlimited scanning time
- Delay time and interval can be customized
- Automatically calculate kinetic rates
- Point by point (peak) view, mark and select
- Adaptive coordinates and a variety of ways to modify coordinates
- Curves and data can be deleted, saved, printed, and exported (in Excel, Word, PDF, etc.)
- Curves and results can be saved and printed automatically





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Functions

Quantitation

- Single wavelength, dual wavelength (difference, ratio), three wavelength and custom methods
- 3 ways to establish a standard curve (input coefficients, measure 2-20 standard samples or input absorbance and concentration values of standard samples)
- 4 fitting methods (linear through zero, linear, quadratic, cubic)
- Parameters can be saved and loaded
- Standard curves can be saved and loaded
- Built-in common concentration units and user-defined units
- Diagram of measure values are displayed, and results are determined automatically
- Results can be recorded, named, deleted, saved, printed, and exported (in Excel, Word, PDF, etc.)
- Customize report layouts

DNA / Protein

- 7 built-in methods (260/280, 260/320, Lowery, UV method, BCA, CBB, Biuret), custom calculation.
- User-selectable one-point measurement times (1-50).
- Parameters can be saved and loaded.
- Display the distribution map of the measured values and automatically determine the results.
- Results can be recorded, named, deleted, saved, printed, and exported (in Excel, Word, PDF, etc.)
- Customize printed reports.

Custom

- Edit formulas as needed
- Formulas can be used for multiple modules
- Formulas can be added, modified, and saved as necessary





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Functions

Spectrum

- The scanning speed is optional (low, medium, high).
- The scanning interval is optional (0.1, 0.2, 0.5, 1, 2, 5, 10 nm).
- A / %T display mode can be switched.
- Automatically find the peak.
- Point by point (peak) view, mark and select.
- Rich map processing functions (arithmetic operation, derivation, area, and 3D map).
- Adaptive coordinates and a variety of ways to modify coordinates.
- Curves and data can be deleted, saved, and printed (in Excel, Word, PDF, etc.)

File

- Files can be deleted, renamed, import/export

System

- System calibration (dark current, wavelength, system baseline)
- Light source (light switch, timing)
- Clock management
- Storage management (storage status display, formatting)
- Language
- General setting (display resolution, system parameter, etc.)
- Reset
- About (System information)

Performance verification

- Wavelength accuracy and wavelength repeatability verification
- Photometric accuracy and photometric repeatability verification
- Stray light verification
- Resolution verification
- Linearity verification

