Spectrophotometer Precision Series, UV/Vis, 4 nm BM

Code HJD010 | Model 4320/3

- 1200 l/mm holographic grating with low stray light and optimised optical 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.
- High resolution TFT colour LCD touch screen provides excellent viewing effect and easy operation.
- Auto-calibration and pre-heating countdown at start-up.
- File management function.
- Automatic wavelength adjustment.
- Can be connected to a printer for direct output of measurement results.
- EasyUV Basic software included.
- IQ/OQ/PQ protocols available.

Code	HJD010
Model	4320/3
Optical system	Single beam,1200 lines/mm grid
Wavelength range	190-1100 nm
Wavelength accuracy	±0,5 nm
Wavelength repeatability	≤0,2 nm
Wavelength display	0,1 nm
Wavelength scanning speed	20-4200 nm/min
Wavelength swing speed	10000 nm/min
Light source	Tungsten, Deuterium
Spectral bandwidth	4 nm
Modes	Photometry, Quantitation, Spectrum
Detector	Silicon photodiode
Photometric range	-0,3-3 A, 0-200 %T, 0-9999.9 C
Sample holder	For 4 x 10 mm cuvettes
Display	TFT colour touchscreen, 5 inches
Storage	236 KB (built-in), unlimited expansion (USB storage)
Interface	RS232 serial port × 1 (printer), USB-A × 1 (USB storage), USB-B × 1 (PC)
Power	100-240 VAC, 50/60 Hz, 120 W
Dimensions (LxWxA)	450x370x187 mm
Weight	10,5 kg

Spectrophotometer Precision Series, UV/Vis, 4 nm BM

Code HJD010 | Model 4320/3

Functions

Photometry

- A/%T/E conversion
- Results can be recorded, renamed, deleted, saved, and printed.

Quantitation

- Single wavelength, dual wavelength (difference, ratio)
- 3 ways to establish a standard curve (input coefficients, measure 2-10 standard samples or input absorbance and concentration values of standard samples)
- 3 fitting methods (linear through zero, linear, quadratic)
- Standard curves can be saved and loaded.
- 19 built-in common concentration units and user-defined units (up to 8 characters)
- Results can be recorded, named, deleted, saved, printed.

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.
- Automatic peak search.
- Point by point (peak) view.
- Adaptive and modifiable coordinates.
- Curves and data can be deleted, saved, and printed.

File

- Files can be deleted, renamed, batch imported/exported, converted to .txt and .csv format.

System

- System calibration (dark current, wavelength, system baseline)
- Light source management (light source switch, timing)
- Clock.
- Memory management (storage status display, formatting)
- Language (English, German, French, Spanish, Portuguese, simplified Chinese)
- General setting (Beep, brightness, close display after, sample holder)
- Restore defaults.
- About (System information)

Performance verification

- Wavelength accuracy
- Photometric accuracy
- Stray light verification
- Noise verification
- Dark noise verification
- Stability verification
- Spectral bandwidth verification