Spectrophotometer

Highlights

- Over 150 pre-programmed testing methods
- Prevention of measurement errors with automatic method recognition and cuvette type detection features
- Integrated GLP techniques assure user security and data protection
- UV-VIS testing wavelengths

The XD 7500 is a UV-VIS Spectrophotometer. It combines a state-of-the-art optical system with ease of use and flexibility for a wide range of water testing applications. By providing users with the full range of functions that is required from a spectrophotometer, including the ability to measure transmission and absorbance; the scanning of spectral data; recording of kinetic measurements; and the ability to create custom measurement methods, the XD 7500 is the ideal spectrophotometers for water quality testing in the laborarory.

Description

- **Optimized for Water Quality Analysis**
  Pre-programmed with over 150 analytical methods that cover a wide variety of applications and industries. All methods are compatible with Lovibond® reagents.
- **Intuitive Interface that Prevents Measurement Errors**
  Save time and eliminate errors with the automatic test recognition feature. Each Lovibond® method is recognized by the instrument with a barcode, which ensures the instrument is in the correct measurement mode before taking a reading. The automatic cuvette type detection feature confirms that the proper vial is being used with the test, which is a critical component to achieving accurate results.
- **Analytical Quality Assurance**
  Standard procedures for analytical quality assurance support the verification of the photometer, the overall system (including the chemical methodology) and the verification of matrix effects. Support of analytical quality assurance procedures include the ability to set tolerances and reminders for calibration protocols.
- **User Security for Data Protection**
  Create up to 3 different user levels with password protection. Each user account can be assigned a level of access to the instrument, ensuring users only have access to what they need.
- **Custom Measurement Methods**
  Users can create their own methods based on up to ten wavelengths with various mathematical operations.

Optics	Grid monochromator with reference beam and beam splitter after exit slit
Light Source	Xenon flash lamp (500 million flashes possible)
Measurement	Concentration, single and multi-wavelength measurement of absorbance and % transmission, kinetics, spectra
Wavelength Range	190 - 1100 nm （nm）
Wavelength Resolution	1 nm
Wavelength Accuracy	± 1 nm on all Holmium peaks
Spectral Scope	4 nm
Photometric Range	-3.3 - +3.3 Abs
Photometric Resolution	Absorption: 0.001 ; Transmission: 0.1 %
Photometric Reproducability	0.003 Abs below 0.6 Abs ; 0.5 % from 0.6 to 2.0 Abs
Photometric Linearity	< 1 % up to 2.0 Abs between 340 to 900 nm
Scan Speed	700 - 2000 nm/min.
Drift	< 0.005 Abs per hour after 15 minutes heat up time

Stray Light	< 0.05 % Transmission at 340 and 408 nm
Suitable Vials	Rectangular Cuvettes 10 mm Rectangular Cuvettes 20 mm Rectangular Cuvettes 50 mm Round Cuvettes 13 mm Round Cuvettes 16 mm Round Cuvettes 24 mm
Display	7" high contrast colour graphic-display
Interfaces	Ethernet USB B USB A for External Memory Keypad Barcode-Scanner PCL Compatible Printer
Operation	Membrane Keyboard
Automatic Cuvette Recognition	Round cuvettes: 13, 16 and 24 mm ; Rectangular cuvettes: 10, 20 and 50mm
Test Recognition	via internal barcode reader
Auto-Check	Self-test at each switch-on: test of memory, processor, internal interface, filter lamp and additional calibration of each wavelength
LIMS Compatibility	ASCII, .csv-files
Internal Storage	approx. 5000 data sets (method, user ID, date, result), autostorage function / manual storage function
Security	Password protection possible: 3 different user levels (guest, user, admin)

Power Drain	100 - 240 V, 50/60 Hz
Power Supply	Buffer batteries (4 x AA), power supply unit with cable
Portability	Benchtop
Compliance	CE
IP Protection Class	EN 60529
Interference Emission	Class B
Interference Immunity	IEC 61000-4-3
Tolerance Extension	0.008 E
Meter Safety	EC Directive 2014/35/EC EN 61010-1:2010
Languages User Interface	German, English, French, Spanish, Italian, Portuguese, Polish, Indonesian, Russian, Chinese, Japanese, Dutch, Swedish, Norwegian, Czech, Romanian, Macedonian, Slovenian, Hungarian, Turkish, Korean, Vietnamese, Thai, Serbian, Malaysian, Danish, Bulgarian
Languages Quick Start Guide	German, English, French, Spanish, Italian, Portuguese, Polish, Indonesian, Russian, Chinese, Japanese, Dutch, Swedish, Norwegian, Czech, Romanian, Macedonian, Slovenian, Hungarian, Turkish, Korean, Vietnamese, Thai, Serbian, Malaysian, Danish, Bulgarian
Languages Full User Manual	German, English, Spanish, French, Italian, Portuguese, Chinese, Japanese

Dimensions	16.61 x 7.68 x 12.72"
Weight	4.5 kg