



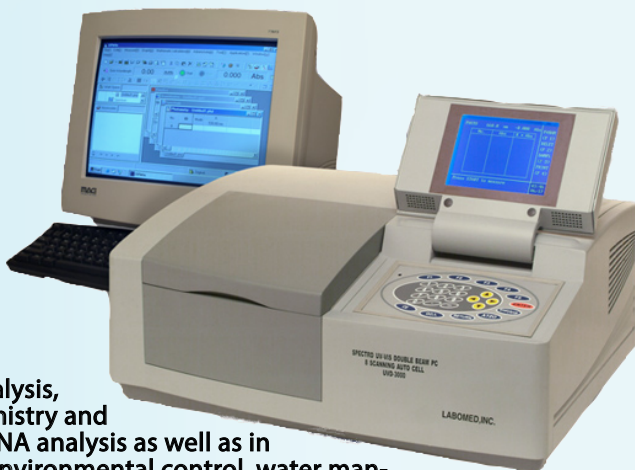
# LABOMED INC.

Manufacturer of Scientific Instruments

## UVD-2950

### **Spectro UV-VIS Double PC (Model UVD-2950)**

is a high performance UV-Vis double beam automatic scanning spectrophotometer. It is a two (2) cell spectrophotometer with a variable bandwidth of 0.5, 1.0, 2.0 and 5.0nm. offers high performance, ease of use and reliability, which can be used in various applications. Spectrophotometer Model UVD-2960 can be used extensively for qualitative and quantitative analysis in such fields as pharmaceutical inspection, clinical analysis, petrochemistry laboratories, chemistry and biochemistry laboratories, DNA/RNA analysis as well as in quality control departments, i.e. environmental control, water management, food processing, and agriculture.



**Spectro UVD-2950** utilizes a new optical system design and is microcomputer controlled. With its focused-beam design, the system provides optimal and reproducible results for small samples. The sample beam and the reference beam are provided within the same sampling space, facilitating wider and longer scan of data providing a more detailed view of the results in an easy to use environment. This instrument has excellent baseline stability and high resolution and permits scanning, quantitative analysis, kinetic spectrophotometric analysis, protein, nucleic acid, DNA/RNA analysis, micro and macro measurements through PC control. This product is capable of processing data, from analytical and spectrum testing.

**Spectro UVD-2950** has a large LCD screen which displays the menu screen and of course makes the device user friendly. Additionally, this instrument permits the apparatus to be linked to a computer and a printer to display the photometric and spectral data on the PC monitor. This connection is controlled by the RS232 AND USB interface, compatible with Windows XP, & and 8, using the new UVWin 6.0 UV-VIS application software.



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## FEATURES

**Baseline Stability:** The Double beam monitoring ratio system enhances baseline stability.

**1 nm fixed bandwidth New!** : The Double beam monitoring ratio system enhances baseline stability.

**Excellent Resolution:** The big-caliber light path enhances the instrument's energy, reduces its noise and raises its resolution performance.

**2 Cell Holder:** Spectro UVD-2950 has 2 cell holders for reference (standard) and sample.

**User-friendly light source:** The light source performs an automatic interchange, selectable within the working range of the light source. The socket deuterium lamps and tungsten lamps facilitate light source replacement, simplify maintenance and reduce operation error.

**Convenient Display:** The large backlit LCD screen displays both photometric values and spectral curves.

**Full use of Computer Technology:** Being computer controlled with RS-232 interface and working on the Windows platform with the UV/Win application software.

The key components are all adopted from the world famous manufacturer, such as deuterium lamp, silicon photodiode and holographic grating, which ensures the stabilization and credibility of the Instrument for extended life.



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## SAFETY

◦The flame conditions are **continuously monitored** and should the flow rates change, an audible alarm sounds.

◦The pressure of the **support gas (oxidant)** is monitored constantly. If the pressure changes, then the flow of the fuel gas will be stopped and the flame will be safely extinguished.

◦A sensor monitors the level of liquid in the drain and will **prevent ignition if too slow**. The flame will also be extinguished if the level of liquid in the drain changes significantly.

◦A **flame sensor** monitors the flame and safely turns off the gas flow to the burner if the flame suddenly extinguishes.

◦The burner is identified by a switch making it **impossible** to light without the burner being fitted.

◦An **emergency flame off button** is installed in case a problem is observed. The flame can be extinguished safely.



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## TECHNICAL SPECIFICATIONS

### Monoprocessor Built-in Application:

- **Photometric Measurement:** Measuring transmittance or absorbance at the current wave length together with K factor calculations.
- **Spectrum Scan:** Carrying out scanning of transmittance or absorbance on the selected wavelength range together with peak-pick module.
- **Quantitative Determination:** Regression of standard curves and direct determination concentration of samples.

### PC Windows Application Software (RS-232 Interface) to link Spectro to computer and printer:

- **Photometric Measurement:** Measuring the photometric values at 1-10 wavelengths together with mathematical calculations according to entered quotations.
- **Spectrum Scan:** Producing Wavelength scans within the operating parameters on samples together with powerful data handling facilities.
- **Quantitative Determination:** Determination of unknown concentration with methods of 1-3 wavelength quantitation, together with fitting of calibration curve of 1st ~ 4th order.
- **Kinetics:** Recording curves of changing photometric values of samples against time course at the selected wavelengths together with powerful data handling facilities.
- **Output:** With the Windows clipboard, the measured data and graphics can be copied to other applicati



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## TECHNICAL SPECIFICATIONS

190 nm – 1100 nm	- Spectral Bandwidth:
1.0 nm. New and Improved!	- Resolution:
1nm.	- Wavelength Display
0.1nm resolution	- Stray Light:
>2.10Abs (200nm)	- Wavelength Accuracy:
+0.3nm (with automatic wavelength correction)	- Wavelength Reproducibility:
+0.2 nm	2) Photometric System:
Double beam optical system	- Photometric Method:
Transmittance, absorbance, energy and concentration	- Photometric Range:
-0.3~3.0 Abs	- Photometric Accuracy:
±0.002Abs (0~0.5A)	±0.004Abs (0.5~1.0A)
±0.001Abs (0~0.5A)	±0.002Abs (0.5~1.0A)
-9999 — 9999	- Photometric Noise:
±0.001Abs (at 500nm, 2nm Spectral Bandwidth 0 Abs)	- Scanning Speed:
1400nm/min	- Baseline Flatness:
0.0008Abs/h (2 hours warming up, 2nm Bandwidth, 500nm)	- Slew Rate of Wavelength:
3600nm/min	3) DNA/RNA Measurement:
	- Results Printout:
Compact and standalone spectrophotometer mainframe	- Light Source:
Socket Deuterium Lamp and Socket Tungsten Halogen Lamp.	- Detector:
Double Beam	- Sample Chamber:
2 cell holder	- Display
Liquid Crystal Display (LCD 320 iÅ240 dot matrix)	- Keypad:
Touch soft keys.	- PC Interface:
PC Interface: RS-232	- Size:
22"x16"x10"	- Weight:
55 Lb	



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## ACCESSORIES

Description	Quantity
AAS-3700	1
HCL Socket (1,2,3,4,5,6,7,8)	8
Liquid Trap	1
Nebulizer	2
Hollow Cathode Lamp (	1
Hollow Cathode Lamp (Cu)	1
Hollow Cathode Lamp ( Hg)	1
Power Cord	1
RS-232C Cable	1
Nebulizer Manual	2
AAWIN Software	1
AAWIN Software Manual	1
Instruction Manual 1	
AAS Cookbook	1
Dust cover	1
Path Aiming Block	1
Slot ted head screw M3X10	2
Push-in Fitting (Pus06-00)	1
Push-in Fitting (100400600)	1
O Rings 14x1.8	4
Fuses for power (3.15A)	4
Fuses for power (0.5A)	1
Socket Screw Wrench	1
Cutting Blade	1
Jump Ring	8
Acetylene Tube (Φ8ID)	10
Air Tube	10