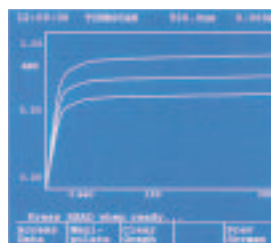
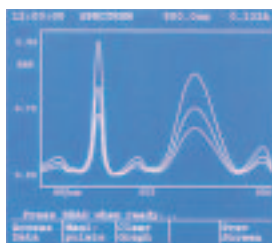




SP-890



Plug and Play Operation!

- LCD graphics display
- Operate as a stand-alone, with a printer or with a PC

Product Description

- Split-beam spectrophotometer for stability (<0.0003A/hr drift at 500 nm.)
- Spectral scanning and overlay for sample identification over the entire 200-1100 nm range.
- Superior optics (bandwidth <2nm) allow high sensitivity and resolution of structurally similar compounds.
- Six-place motorized cuvette carrier allows automation of multiple samples and is standard equipment.

Operation

- Prompting display minimizes time learning instruction manual.
- Wide array of accessories increases throughput and allows instrumental flexibility. Perform kinetic analyses, analyze hundreds of samples in an hour.
- Optional software has built-in routines for DNA, RNA and protein analysis.
- Store analytical methods without external devices.

Application

- DNA quantitation
- RNA quantitation
- Protein quantitation

ACCESSORIES

Model #	Description
DS1102X1	Software package to accompany SP890
PU1102X1	Sipper Option for SP890 (requires flow cell -- not included)
HR1102X2	30 microliter Suprasil flow through cell (z Height - 8.5mm)
HR1102X1	Solid state heater cooler and single cuvette holder; 25, 30 and 37 degree control
HR1102X6	3.5 ml, 10 mm path length Suprasil cuvette; 2-sided
HR1102X5	1.75 ml, 5 mm path length Suprasil cuvette; 2-sided
HR1102X4	0.7 ml, 2 mm path length Suprasil cuvette; 2-sided
HR1102X3	0.35 ml, 1 mm path length Suprasil cuvette; 2-sided (sold in pairs)
HR1102X7	0.4 ml, 10 mm path length Suprasil 2-sided microcuvette
HR1102X8	0.16 ml, 10 mm path length Suprasil 2-sided ultramicro cuvette

ORDERING INFORMATION

Model #	Electrical (50/60 Hz) Voltage	Description
SM110245	120V	SP-890 UV Visible Scanning Spectrophotometer
SM110240-33 ¹	230V	SP-890 UV Visible Scanning Spectrophotometer
SM110255	120V	SP-890 UV Visible Scanning Spectrophotometer, with software package
SM110250-33 ¹	230V	SP-890 UV Visible Scanning Spectrophotometer, with software package

¹ CE Marked



SP-830+

User-Friendly Operation for Classroom or QA Lab!

- Motorized optical filter wheel and grating for easy, automated operation.
- Multi-use sample compartment accommodates square cuvettes, round tubes and rectangular long-path cells for various applications.



SP-870+

Model 830 Plus Visible Spectrophotometer

- Two-line, 10 character LCD display for easy viewing of information.
- Motorized optical filter wheel and grating for easy, automated operation.
- Multi-use sample compartment houses square cuvettes, round tubes and rectangular long-path cells for various applications.
- Printer port for interfacing spectrophotometer with a computer or external printer.

Model 870 Plus Visible Spectrophotometer

- Two-line, 16 character LCD display for easy viewing of information.
- Motorized optical filter wheel and grating for easy, automated operation.
- Multi-use sample compartment houses square cuvettes, round tubes and rectangular long-path cells for various applications.
- Printer and RS232 ports for interfacing spectrophotometer with a computer or external printer.
- PC software for machine data download and real-time data reading.

Application

- Phosphorus analysis
- Iron analysis
- Chlorophyll analysis
- Color and clarity testing
- Turbidity

Includes FREE Package of 5 Round Cuvettes

The SP-830 Plus and SP-870 Plus Visible Spectrophotometers are digital microprocessor controlled instruments, providing photometric absorbance, transmittance and concentration measurements in the wavelength range of 320 to 999 nm or 1100 nm respectively.

PRODUCT SPECIFICATIONS

Model #	SP-830+	SP-870+
Wavelength Range	320 - 999nm	320 - 1100nm
Bandwidth	5nm	2nm
Accuracy	±2nm	±1nm
Repeatability	±0.3nm	±0.3nm
Absorbance Range	-0.300 - 3.5A	-0.300 - 3.5A
Concentration Range	0 - 2,999	0 - 99,999.999
Factor	1 - 999	0.1 - 9,999.9
Photometric Accuracy	0.005A at 1.000A	0.005A at 1.000A
Stability	0.003A/hr at 0A (1/2 hr)	0.003A/hr at 0A (1/2 hr)
Stray Light	<0.1% T at 340nm	<0.1%T at 340nm
Light Source	Halogen	Halogen
Cuvettes	Round 10 - 13 mm, Square 10 mm, Rectangular 50 mm	Round 10 - 13 mm, Square 10 mm, Rectangular 50 mm Round 1/2", Round 1"
Display	LCD 10 x 2 Large Characters	LCD 16 x 2 Large Characters
Data Storage	N/A	100 sets
Analog Output	N/A	Optional 0 - 4V
Interface	Printer	RS232C, Printer
PC Software	N/A	Real time data display and storage Data from memory
Measurement	Absorbance, % Transmission, Concentration	Absorbance, % Transmission, Concentration
Functions	Validation Lamp Tuning	Lamp Time Initial Wavelength Resolution Validation Lamp Tuning
Dimensions	400mm (W) x 300 mm (D) x 145 mm (H)	400mm (W) x 300 mm (D) x 145 mm (H)
Weight	7.5 kg	7.5 kg

ORDERING INFORMATION

Model #	Description	Dimensions Inches (mm) L x W x H	Shipping Weight Lbs. (kg)
SM110215	SP-830+ Visible Spectrophotometer	11.8 x 15.7 x 5.7 (300 x 400 x 145)	16.5 (7.5)
SM110210-33 ¹	SP-830+ Visible Spectrophotometer	11.8 x 15.7 x 5.7 (300 x 400 x 145)	16.5 (7.5)
SM110235	SP-870+ Visible Spectrophotometer	11.8 x 15.7 x 5.7 (300 x 400 x 145)	16.5 (7.5)
SM110230-33 ¹	SP-870+ Visible Spectrophotometer	11.8 x 15.7 x 5.7 (300 x 400 x 145)	16.5 (7.5)

¹ CE Marked

ACCESSORIES

Model #	Description
34F01-15	Cuvette, Round, 100 x 13 mm Round Borosilicate Glass, 6 ea.
34F01-14	Cuvette, Square, Micro Disposable Polystyrene, 0.5 - 2.9 ml capacity, 4-clear sides, 500 ea.
34F01-12	Cuvette, Square, Disposable Polystyrene, 0.5 - 4.5 ml capacity, 4-clear sides, 500 ea.