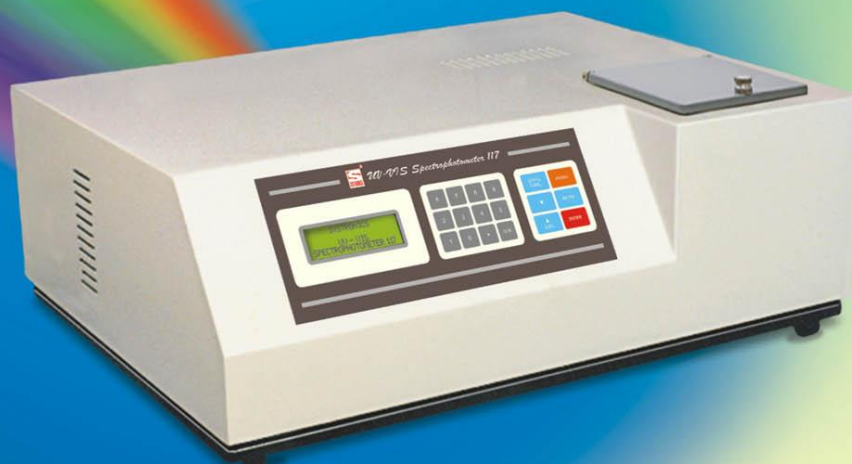




UV - VIS SPECTROPHOTOMETER 117

MICRO CONTROLLER BASED



SALIENT FEATURES

- Micro controller based, stand alone unit
- 20 X 4 alphanumeric LCD display
- Automatic source optimisation
- 200 - 1100 nm range
- 2nm bandwidth
- %T, ABS, CONC measuring modes
- Single / Multi wavelength and Spectrum / Time Scan operating modes
- Data processing (Stand - alone) Peak - pick, 1st derivative
- Data processing (through optional PC) Peak-pick, Point-pick, Expansion / Overlaying / Averaging / Subtraction / 1st to 4th derivatives of spectra, besides storage and retrieval of data
- Automatic 5- position sample changer. 500 μ l sample in 1ml cuvette and 2 ml in 4 ml cuvette

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EASY MENU DRIVEN OPERATION

OPERATING MODE
1. SINGLE WAVELENGTH
2. MULTI WAVELENGTH
3. SCAN 4. TIME SCAN

Offers 4 operating modes.

SINGLE WL MODE
MEASURING MODE...
1. ABS 2. %T
3. CONC

Provides 3 measuring modes.

CONCENTRATION MODE
1. BY FACTOR
2. BY STANDARDS

Measures concentration both by factor and standards.

MULTI WL MODE
ENTER NO. OF WL =
(Min. 2 & Max. 8)

Facilitates menu driven operation.

SYSTEM UTILITY
1. LAMP OPTIMISATION
2. CUVETTE MATCHING
3. SWITCHOVER WL

Provides useful utilities

W OPTIMISATION OK
D2 OPTIMISATION OK

Ensures max. source energy.

SYSTRONICS UV - VIS SPECTROPHOTOMETER 117 is a micro controller based single beam scanning instrument. It provides three measuring modes : Percent Transmittance (%T), Absorbance (ABS) and Concentration (CONC). The available operating modes are Single-Wavelength, Multi-Wavelength, Spectrum Scan and Time Scan. It covers 200-1100 nm and offers 2 nm bandwidth. Combination of user friendly software, 20 x 4 alphanumeric LCD display and 18 soft-touch keys provide a stand alone operation. All measurement results are available on the display except for the Spectrum Scan. A printer prints the scan besides providing hard copy of measurements. RS-232 is optional to enhance data processing ability through PC.

SPECIFICATIONS

OPTICS : Modified Czerny - Turner Monochromator geometry for better aberration correction with Holographic Grating of 1200 lines/mm blazed at 250 nm.

WAVELENGTH

- Range : 200 to 1100 nm
- Resolution : 0.1 nm
- Accuracy : ± 1 nm
- Repeatability : ± 0.5 nm
- Bandwidth : 2 nm

PHOTOMETRIC

- Range : 0 to 2.5 Abs
- Accuracy : ± 0.005 Abs at 1A
- Repeatability : ± 0.002 Abs at 1A
- Drift : 0.003 Abs/hr (After 1 hr warmup at 500 nm)

STRAY LIGHT

Less than 0.1% T at 220 nm & 370 nm

BASELINE CORRECTION

Automatic baseline correction

BASELINE FLATNESS

± 0.003 Abs/hr (After 40 minutes warm-ups)

MEASURING MODES

- % Transmittance
- Absorbance
- Concentration by K-factor and Multi-standards

OPERATING MODES

- Single Wavelength
- Multi Wavelength
- Spectrum Scan
- Time Scan

DATA PROCESSING : Stand Alone • Peak-Pick • Spectrum printout

SCAN SPEED : Low, Medium and High

DATA INTERVAL : Depends on wavelength scan-span & Scan-speed

SAMPLE HOLDER : 5 position for 10 mm cuvette (automatically)

SAMPLE VOLUME : 2 ml in 4 ml cuvette or 500 μ l in 1 ml cuvette

SOURCE : Tungsten Halogen Lamp (320 to 1100 nm)

Deuterium Lamp (200 to 340 nm)

DETECTOR : UV - enhanced wide range solid state photodiode

DISPLAY : 20 character, 4 line backlit alphanumeric LCD

KEYBOARD : 18 keys (11 numeric and 7 functional)

PRINTER PORT : Epson compatible 80 Column Dot Matrix

RS 232 PORT : PC Link data transfer

POWER : 230V $\pm 10\%$, 50 Hz

DIMENSIONS : 560 (W) X 425 (D) X 205 (H) mm

WEIGHT : 21 kg (Approx)

ACCESSORIES : Two matched 10 mm path length Quartz cuvettes

OPTIONAL ACCESSORIES

- Holder for 50 mm or 100 mm cylindrical and rectangular cuvettes
- Personal Computer / Laptop
- Epson compatible 80 column D.M. Printer
- Standard RS 232 interface for Window based PC link Software for Spectrum Display, Storage/Retrieve, Peak -Pick, Point - Pick, Expansion of spectra, 1st, 2nd, 3rd & 4th Derivatives, Averaging of Scans, Subtraction of Two Scans

*Technical Specifications, Appearance & model number are subject to change without prior notice in keeping up with the state of art.