BSR
Technologies

COOL SPECTRO 100
Visible Spectrophotometer

For more than five decades spectrophotometry techniques are being used in quality assurance labs to test pharmaceutical, chemical and clinical products.

BSR Technologies Pvt. Ltd. introduces state of art Visible Spectrophotometer COOL SPECTRO 100 designed for long term routine analysis and quality control in industries, and for training students at educational institutions. The COOL SPECTRO 100 has been developed by a team of experts with more than forty years of experience in designing, manufacturing and marketing analytical instrumentation products.

Unique Design Features

- Rugged with no internal moving parts
- Compact size saves space in the lab
- No computer or serial cable required Just plug in and it is ready to use
- Large, bright , color 4.3 inch LCD display
- Navigation key pad and on- screen menus
- Fixed Grating for consistent wavelength accuracy
- USB connector provision to connect memory stick/ Pen drive or PC to save and print analysis report.
- No special or separate printer is required to print the report
- In built Switch Mode Power Supply takes care of power fluctuations
- Removable power cord

Technology and Speed

- CMOS image Sensor detector scans each portion of the spectrum with high speed and ideal integration time.. This capability provides the best possible photometric performance for accurate , reliable results at any wavelength
- Single wavelength photometry mode measurement can be completed in about 3 seconds
- Spectrum Scan from 400 nm to 900 nm is achieved in about 10 seconds

Modes of Operation

- Single and Multi wavelength Photometry Mode
  - Measures absorbance or transmittance at fixed wavelength
- Quantitative Mode
  - Calibration up to 4 standards
  - Facility to enter the correction factor
  - Methods are saved in USB device and can be retrieved
- Spectrum Mode
  - Spectrum scan with peak identification
- User Defined Mode (optional)
  - User can enter own mathematical functions and formulae
  - Results are displayed
  - Methods are saved in USB device and can be retrieved
  - Supports methods up to four factors and wavelengths

Optics	Single beam (600 lines/mm plain grating)
Wave length Range	340 nm-1000 nm
Wave length Interval	1 nm
Light Source	10 Watt Tungsten-Halogen lamp (life 1000 hrs.)
Detector	2048 pixels CMOS image sensor
Spectral Bandwidth	≤ 4 nm
Wavelength Accuracy	±2 nm
Wavelength Repeatability	± 1 nm
Photometric Range	Absorbance : -0.3 to 2.5 Abs
	Transmittance : 0.1% to 100 %
Photometric Accuracy	± 0.01 Abs (at 0.3 Abs)
	± 0.05 Abs (at 1.0 Abs)
	(NIST traceable standard filter used for calibration at factory)
Photometric Repeatability	± 0.3 % T (at 50 %T)
Stray Light	Less than 0.2 %T at 400 nm
Sample Compartment	Dimension : 125 mm W X 100 mm D X 60 mm H
	(provision to install optional accessory)
Display	4.3 inch diagonal color graphical LCD (480 x 3(RGB) x 272 pixel)
Key Pad	9 Keys Embossed tactile PCB type
Standard Interface	USB- A for connection to USB memory device, USB-B for connection to PC- Provision for calibration at factory
Power Supply	100-240 V, 50-60 Hz (selected automatically) 100 VA
Dimension	435 mm W X 335 mm D X 120 mm H
Weight	5 Kg

270 mm

115 mm   115 mm

85 mm

0 mm   0 mm

Ordering Information

Part Number	Description
250FPA01	COOL SPECTRO 100 Visible Spectrophotometer with plastic cuvettes (10 nos.)

Optional Accessories

2506110101	Pair of glass cuvette 10 mm path length
2507110102	Universal cell holder for 10 mm, 50 mm & 100 mm cell
2507110103	Cell holder for 10 mm & 50 mm cell
2506110104	Pair of glass cuvette 50 mm path length
2506110105	Pair of glass cuvette 100 mm path length

* Product specifications are subject to change without notice.

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