

SALIENT FEATURES AND BENEFITS

- Smallest form factor double beam spectrophotometer with a high-resolution bandwidth
- Comes with automatic wavelength calibration and programmable wavelength for lamp change over
- Lamp selection enables conserving the life of the two lamps, deuterium and tungsten with auto focusing
- Menu driven microprocessor based software makes the stand-alone unit user friendly.
- Stand alone unit offers an advanced technology with data processing features for scanning discrete wavelength, concentration determination by standards and ϵ -factor method, time scan with minimum time interval of 1.0 sec, auto-zero facility, self check and self diagnostic modes.
- Software is 21 CFR Part 11 compliant with password method protection, Instrument logbook etc. cGLP compliance addressed.



APPLICATIONS

- For any spectrophotometric or colorimetric measurement where applications require very high-resolution bandwidth and cGLP compliance is mandatory.
- DNA/RNA Quantification
 - Nucleic Acid Purity by Absorbance ratio and concentration by factor method
- PROTEIN Determination
 - By UV Absorbance, Lowry, Biuret, CBB and BCA methods
- Enzyme Kinetics
- Micronutrients like N, P, K, S, Ca, Mg, Zn, Cu, B, Mo, etc., in Agricultural soil, Plants etc.
- Organic compounds in Biological matter
- Glucose, Fructose, Carbohydrates, Proteins etc., in Foods.
- Edible dyes, alcohols etc., in Beverages
- Purity of constituents in Pharmaceuticals
- Toxic elements like Cadmium, Lead, Mercury, Arsenic and Mercury etc., in Effluents.
- Constituents in compositions used in Metallurgy, Fertilizer, Pesticide, Chemical, Petrochemical, Steel, Cement, Glass & Other Industries.

SPECIFICATIONS

PARAMETER

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| SPECTRAL | |
| Range | 190 to 1100 nm |
| Bandwidth | 1.8 nm |
| PHOTOMETRIC | |
| System | Double beam optics |
| Range | ± 3.000 Abs |
| Stability (Baseline) | ± 0.003 Abs/hr. after 2 hour warm up |
| Stray Light | <0.05% T at 220 nm with NaI 10g/L |
| LIGHT SOURCE | Deuterium Lamp (D ₂) & Tungsten (W) Halogen Lamp |
| MONOCHROMATOR | Concave holographic grating with 1200 lines/mm |
| DETECTOR | Photodiode |
| CONTROL | Built -in Windows Based PC Control |
| PORTS | 3 USB Ports - Can be used for Printer, Keyboard, Pen drive, Mouse TCP/IP Port - Network connectivity, PC Port - PC connectivity |
| DATA PROCESSING | |
| Built-in Advanced Capacity | Spectrum, Overlay, Time Scan, Discrete λ , Ratiometric, Concentration, ϵ -factor, Upto 4 th order derivative, Peak Picking, Spectra Zooming, Data Saving, Auto Zero Facility, Retrieving and Printing MS Office Tools |
| Microprocessor Mode | Spectrum, Concentration, Protein Assay DNA / RNA purity, Concentration by Factor, Enzyme Kinetics |
| PC Mode | Spectrum, Overlay, Time Scan, Enzyme Kinetics, Multiwavelength, Ratiometric, Quantitative, Peak picking Spectra zooming, Smoothing, Averaging, Comparison, Data saving & Retrieving, up to 4th order Derivative and printing |
| SAMPLE ATTACHMENT | |
| Standard | 5mm path length Sipper module with 10 to 50°C Temp. Controlled holder |
| Optional | Fixed 10-100 mm long path length cuvette holder |

Specifications subject to change due to continual development