

SP1000UV Spectrophotometer

UV/Visible Spectrophotometer for Teaching, Food, Environmental & Chemical Analysis

MODEL: SP1000UV

The SP1000UV is a single-beam UV-Vis spectrophotometer covering 195–1050 nm through a tungsten/deuterium dual-lamp system. With a 4 nm spectral bandwidth and patented wavelength drive delivering ± 0.8 nm accuracy, it provides reliable, repeatable measurements across the full UV and visible spectrum.



SPECIFICATIONS

Light source	Tungsten, Deuterium
Detector	Silicon photodiode
Spectral bandwidth	4 nm
Wavelength range	195–1050 nm
Wavelength accuracy	± 0.8 nm; 0.3 nm @ 656.1 nm
Wavelength repeatability	≤ 0.3 nm
Measurement Range	-3 ~ 150 A (10 mm equivalent)
Photometric Accuracy	± 0.003 A (0–0.5 A); ± 0.006 A (0.5–1 A); ± 0.5 %T (0–100 %T)
Photometric Repeatability	≤ 0.002 A (0–0.5 A); ≤ 0.003 A (0.5–1 A); ≤ 0.2 %T (0–100 %T)
Noise	≤ 0.0001 A @ 0.0 A (500 nm, RMS)
Stability	≤ 0.002 A/h @ 500 nm (2 h after preheating)
Stray Light	≤ 0.2 %T @ 220 nm (NaNO ₂); ≤ 0.05 %T @ 220 nm (NaI)
Measurement Modes	Photometry, Quantitation, Absorbance, Transmittance
System	Android
Sample Compartment	10 mm 4-cell manual changer
Display	5-inch TFT colour touchscreen
Power	100–240 V AC, 50/60 Hz, 120 VA
Dimensions	456 (W) × 360 (D) × 185 (H) mm

KEY FEATURES

195–1050 nm UV-Vis Range

Dual tungsten/deuterium lamp system extends coverage into the UV, enabling a broad range of UV and visible applications from a single instrument.

Full Photometry & Quantitation Suite

Supports A/%T/E conversion, single and dual wavelength modes, and three standard curve fitting methods with 19 built-in and up to 8 user-defined concentration units.

5-Inch TFT Colour Touchscreen

Integrated die-cast aluminum optical unit with a fully enclosed light path resists vibration and interference.

Versatile Connectivity

S232 printer port, USB-A for storage expansion, USB-B for PC connectivity with EasyUV software support, and firmware upgrades via USB.

APPLICATIONS

The SP1000UV is well suited for pharmaceutical development and quality control, biochemical and protein analysis, nucleic acid quantification, environmental monitoring, food safety testing, and academic research — wherever precise absorbance, transmittance, or concentration measurements are needed across the full UV-Vis spectrum.

Teaching & Education

Food Testing

Environmental Monitoring

Chemical Analysis