

Precision Spectral Analysis, Built for the Classroom



The SE100 introduces students to the principles and practice of spectrophotometry on an instrument that is both genuinely capable and easy to use. Its holographic grating optical system delivers low stray light and stable wavelength accuracy across the full 320 to 1050 nm range, giving students reliable, real-world results from day one.

Straightforward enough for introductory courses, yet precise enough for advanced undergraduate and postgraduate work, the SE100 supports a broad range of teaching applications: from food safety and environmental analysis to chemical characterisation and quantitative experiments. A dependable, no-fuss platform that lets students focus on learning, not troubleshooting.

Key Features

Full-Spectrum Coverage

320–1050 nm wavelength range enables a wide variety of analytical applications in a single instrument.

Rugged, Reliable Construction

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

Versatile Sample Handling

Interchangeable cuvette and test tube holders accommodate a broad range of sample types and formats.

High-Precision Optics

1200 lines/mm holographic grating delivers exceptional wavelength accuracy with minimal stray light.

Effortless Operation

Large touchscreen interface, one-key calibration, and direct data readout reduce setup time and user error.

Tool-Free Maintenance

Bottom-access lamp replacement — plug-and-play, no optical realignment required.

Specifications

Optical system	Single beam, 1200/mm grating	Photometric Range	-0.3–3 A, 0–200 %T, 0–1999 C
Detector	Tungsten lamp	Photometric Accuracy	±0.5 %T (0–100 %T)
Spectral Bandwidth	4 nm	Photometric Repeatability	±0.2 %T (0–100 %T)
Wavelength Range	325–1050 nm	Stray Light	≤0.2 %T (360 nm)
Wavelength Accuracy	±1.5 nm	Noise	≤0.001 A @ 500 nm
Wavelength Repeatability	≤0.5 nm	Sample Holder	10 mm cuvette/13 mm test tube combination sample holder
Wavelength Resolution	1 nm	Display	3.5 inch TFT color LCD screen (Resolution: 480×320)
Wavelength Selection	Automatic	Interface	USB-B×1 (PC)
Wavelength Calibration	Automatic calibration after power on	Power Supply	100–240V AC, 50–60Hz, 55W