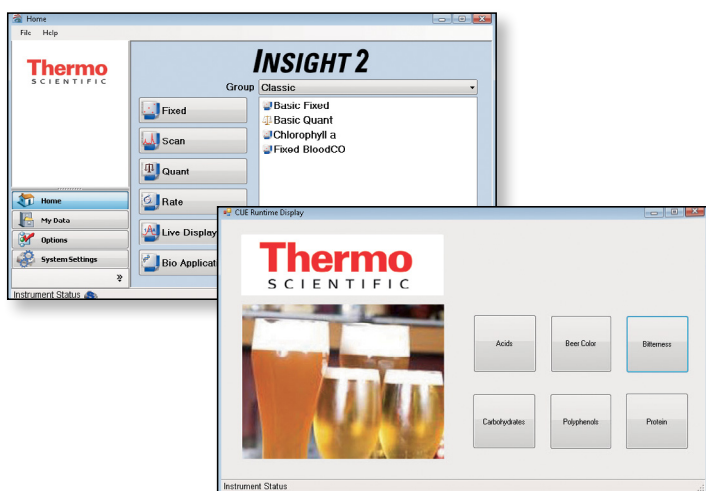


# Evolution 201, 220 and 260 Bio UV-Visible Spectrophotometers

## Guaranteed performance specifications



The Thermo Scientific™ Evolution™ 200 Series UV-Visible (UV-Vis) Spectrophotometers offer unrivaled features and performance with a modern, double-beam design; large, room-light resistant sample compartment; and a complete line of accessories. Thermo Scientific™ INSIGHT™ Software streamlines your workflows and provides maximum support for all your analytical needs with comprehensive and versatile Fixed, Scan, Quant, and Rate applications.

**Evolution 201** features a 1.0 nm spectral bandwidth for high-resolution data in routine quality control and basic research applications.

**Evolution 220** increases the versatility of your system with a selectable bandwidth option for a wider variety of applications. Use with fiber optic probes and integrating spheres for optimal performance with these accessories.

**Evolution 260 Bio** adds the convenience of pre-programmed Bio Applications for increased productivity in your life science laboratory.



## Guaranteed performance specifications

		Evolution 201 UV-Visible Spectrophotometer	Evolution 220 UV-Visible Spectrophotometer	Evolution 260 Bio UV-Visible Spectrophotometer
Optical design		Double-beam with sample and reference cuvette positions Czerny-Turner Monochromator	Double-beam with sample and reference cuvette positions; Application Focused Beam Geometry; Czerny-Turner Monochromator	Double-beam with sample and reference cuvette positions; Application Focused Beam Geometry; Czerny-Turner Monochromator
Spectral bandwidth(s)		1.0 nm	Variable: 1.0 nm; 2.0 nm; AFBG Microcell optimized; AFBG Fiber optic optimized; AFBG Materials optimized	Variable: 1.0 nm; 2.0 nm; AFBG Microcell optimized; AFBG Fiber optic optimized; AFBG Materials optimized
Light source		Xenon Flash Lamp, 3-year warranty (7 years typical lifetime)		
Detector		Dual Silicon Photodiodes		
Scan ordinate modes		Absorbance, % Transmittance, % Reflectance, Kubelka-Munk, log (1/R), log (Abs), Abs*Factor, Intensity		
Wavelength	Range	190–1100 nm		
	Accuracy	±0.5 nm (541.9, 546.1 nm mercury lines) ±0.8 nm (full range 190–1100 nm)		
	Repeatability	≤0.05 nm (546.1 nm mercury line, SD of 10 measurements)		
Scanning speed		<1 to 6000 nm/min; variable		
Data intervals		10, 5, 2, 1.0, 0.5, 0.2, 0.1 nm		
Photometric	Range	>3.5 A		
	Display Range	-0.3 to 4.0 A		
	Accuracy – Instrument	1A: ±0.004 A 2A: ±0.008 A Measured at 440 nm using neutral density filters traceable to NIST		
	Repeatability	±0.0002 A		
	Noise	0A: ≤0.00015 A 1A: ≤0.00025 A 2A: ≤0.00080 A 260 nm, 1.0 nm SBW, RMS		
	Drift (Stability)	<0.0005 A/hr 500 nm, 1.0 nm SBW, 1 hour warm-up		
	Stray Light	KCl, 198 nm: ≤1% T NaI, 220 nm: ≤0.05% T NaNO <sub>2</sub> , 340 nm: <0.05% T		
Baseline flatness		±0.0010 A 200–800 nm, 1.0 nm SBW, smoothing		
Keypad		Sealed Membrane		
Local control option		Optional tablet control module		
Dimensions (W × D × H)		62.2 × 48.6 × 27.9 cm (24" × 19" × 11")		
Weight		14.4 kg (32 lb)		
Electrical supply		100–240 V, 50–60 Hz, selected automatically 150 W maximum		

Find out more at [thermofisher.com/uv-vis](http://thermofisher.com/uv-vis)