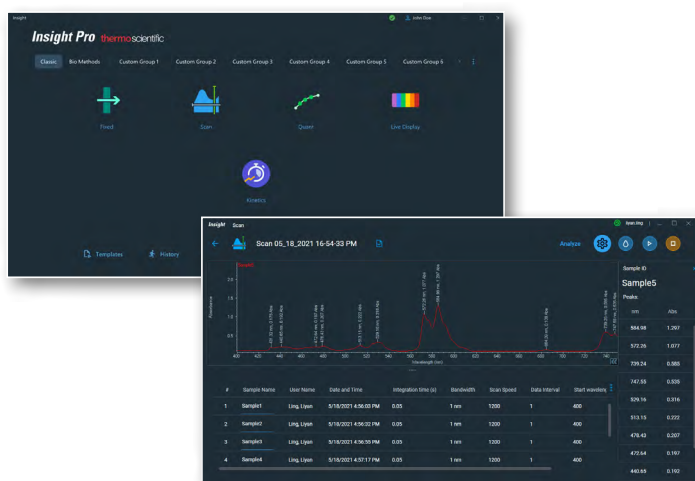


Evolution One and One Plus UV-Visible Spectrophotometers

Guaranteed performance specifications



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

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

Evolution One Plus 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.



Guaranteed performance specifications

		EVOLUTION One UV-Vis Spectrophotometer	EVOLUTION One Plus UV-Vis 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
Spectral bandwidth(s)		1.0 nm	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: ≤0.00010 A 2A: ≤0.00025 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 ₂ , 340 nm: <0.05% T	
Baseline flatness		±0.0006 A 200–800 nm, 1.0 nm SBW, smoothing	
Keypad		Sealed Membrane	
Dimensions (W × D × H)		593 × 475 × 266 mm (23.3" × 18.7" × 10.6")	
Weight		14.5 kg (32 lb)	
Electrical supply		100–240 V, 50–60 Hz, selected automatically 150 W maximum	

For pharmacopeia specifications and more, please visit

thermofisher.com/evolution

For research use only. Not for use in diagnostic procedures. For current certifications, visit thermofisher.com/certifications.

© 2021 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. **PS53460_E 0921 M**