

GENESYS instrument specifications

Description		GENESYS 30	GENESYS 40	GENESYS 140	GENESYS 50	GENESYS 150	BioMate 160	GENESYS 180
Optical Design		Single Beam			Dual Beam			Double Beam
Spectral Bandwidth		5 nm			2 nm			
Light source (Typical Lifetime)		Tungsten-Halogen (>1000 hours)			Xenon Flash Lamp (>5 years typical, 3 years guaranteed)			
Detector		Silicon Photodiode		Dual Silicon Photodiodes				
Wavelength	Range	325–1100 nm			190–1100 nm			
	Accuracy	±2 nm	±0.5 nm					
	Repeatability	<±1 nm	<±0.2 nm					
	Scan Speed	Automatic—up to 1200 nm/min	Automatic—up to 1800 nm/min		Slow, medium and fast (up to 1600 nm/min)			
	Data Resolution	1 nm	0.2 nm, 0.5 nm, 1 nm, 2 nm, 5 nm					0.1 nm, 0.2 nm, 0.5 nm, 1 nm, 2 nm, 5 nm
Photometric	Range	–3A to +3A	–3A to +3.5A		–2A to +3.5A			
	Display	–3A to +3A, 0 to 200 000 %T, 0 to 9 999 999 C	–3A to +5A					
	Accuracy	±0.002A (0–0.3A) 0.5% of ABS reading (0.301A – 2.5A)	±0.002A at 0.5A ±0.004A at 1.0A ±0.008A at 2.0A					
	Repeatability ¹	±0.002 A	±0.001A at 1A					
	Noise ²	≤0.001A at 0A ≤0.001A at 1A ≤0.002A at 2A	≤0.00020A at 0A at 260 and 500 nm ≤0.00030A at 1A at 260 and 500 nm ≤0.00040A at 2A at 260 and 500 nm					
	Drift ³	<0.002A/Hr	<0.0010A/Hr		<0.0005A/Hr			
Stray Light		<0.1%T at 340 nm and 400 nm	<0.05%T at 340 nm and 400 nm		< 1.0%T 198 nm (KCl) , <0.05%T at 220 nm (NaI), <0.03%T at 340 nm (NaNO ₂)			
Baseline Flatness		<0.003A	±0.005A		±0.002A			
Display		5-inch diagonal, 32-bit color display, 800 × 480 pixels	7-inch color touchscreen, fixed, high definition, 800 × 1280 pixels	7-inch color touchscreen, tiltable, high definition, 800 × 1280 pixels	7-inch color touchscreen, fixed, high definition, 800 × 1280 pixels	7-inch color touchscreen, tiltable, high definition, 800 × 1280 pixels		
Keypad		Tactile rubber 23 keys with numeric keypad	Touchscreen					
Sample Compartment		<ul style="list-style-type: none">• Accessible from top, front or side• All platforms can accommodate 100 mm cells• Available accessory for test-tubes up to 25 mm diameter and 150 mm height• Removable, washable sample compartment liner with magnetic placement and hold-down		Accommodates (optional): <ul style="list-style-type: none">• 8-position cell changer• 4-position cell changer (long path cells)• Peltier thermostatted cell holder (20–60 °C)• Sipper accessory	<ul style="list-style-type: none">• Accessible from top, front or side• Able to accommodate cells up to 100 mm pathlength• Available accessory for test-tubes up to 25 mm diameter and 150 mm height• Removable, washable sample compartment liner with magnetic placement and hold-down	Accommodates (optional): <ul style="list-style-type: none">• 8-position cell changer• 4-position cell changer (long path cells)• Peltier thermostatted cell holder (20–60 °C)• Sipper accessory• Fiber optic probe coupler		
Printer		Snap-on printer available						
Connectivity		<ul style="list-style-type: none">• USB-A on front face supports flash memory devices for method and data storage• USB-B on side supports connection to a Windows computer running optional remote control software; export data to PC via USB	<ul style="list-style-type: none">• Single USB-A supports flash memory devices for method and data storage• Duplex USB-A supports connection to a Windows computer running optional remote control software, keyboard, mouse• Export data to network or PC via Ethernet or Wi-Fi• Print via USB, Ethernet or Wi-Fi					
Languages		English (Available soon: Spanish, German, French, Italian, Portuguese, Russian, Chinese, Japanese, Korean, Thai)						
Dimensions		35.5 × 38.5 × 19.5 cm (L × W × H)						
Weight		7.5 kg						
Power Requirements		External AC to DC converter. Voltage and Frequency (Hz) selected automatically, 100–240 volts, 50–60 Hz.						
Warranty		2 years standard with 1 year extension upon registration of the instrument with Thermo Fisher Scientific within 6 months of purchase						

1. Measured at 1.0A at 546 nm 2. RMS at 500 nm. 60 consecutive measurements. 3. At 500 nm after warmup. 2hrs GENESYS 30, 1hr all others. *** Visit www.thermofisher.com/connect for details

Find out more at thermofisher.com/genesys

ThermoFisher
SCIENTIFIC