thermo scientific

Varioskan LUX microplate readers

Technical specification for Varioskan LUX microplate readers

Absorbance	
Plate types	6- to 384-well plates
Wavelength	Double monochromators
selection	
Wavelength	200–1000 nm
range	
Light source	Xenon flash lamp
Read-out range	0-6 Abs
Linear	0-4 Abs (96-well plate) at 450 nm, ±2%
measurement	0-3 Abs (384-well plate) at 450 nm, ±2%
range	
Accuracy	0.003 Abs or ±2%, at 200–399 nm (0–2 Abs)
	0.003 Abs or ±1%, at 400-1000 nm (0-3 Abs)
Precision	SD < 0.001 Abs or CV < 0.5%, at 450 nm (0-3 Abs)
Fluorescence inte	ensity
Plate types	6- to 1536-well plates
Wavelength	Double excitation and emission monochromators
selection	
Excitation	200-1000 nm
wavelength range	
Emission	270-840 nm
wavelength range	
Light source	Xenon flash lamp
Sensitivity	Top reading: <0.4 fmol fluorescein/well (black 384-
	well plate)
	Bottom reading: <4 fmol fluorescein/well (clear-
	bottom, black 384-square well plate)
Dynamic range	Top reading: >6 decades
	Bottom reading: >5.5 decades
Time-resolved flu	
Plate types	6- to 1536-well plates
Wavelength	Filters (spectral scanning with double excitation
selection	and emission monochromators)
Excitation	Fixed to 334 nm (spectral scanning 200–840 nm)
wavelength range	400,700 (
Emission	400-700 nm (spectral scanning 270-840 nm)
wavelength range	Vanan flash lama
Light source	Xenon flash lamp
Sensitivity	<1 amol Eu/well (white, low-volume 384-well plate)
Dynamic range	>6 decades
Luminescence	0 + 4500
Plate types	6- to 1536-well plates (spectral scanning from 6- to 384-well plates)
Wavelength	Direct or filters (spectral scanning with double
selection	monochromators)
Wavelength	360-670 nm
range	
Sensitivity	<7 amol ATP/well (white 384-well plate)

eaders	
AlphaScreen	
Plate types	6- to 1536-well plates
Wavelength	Filters
selection	
Excitation	Fixed to 680 nm
wavelength range	
Emission	400–660 nm
wavelength range	LED
Light source Sensitivity	LED <100 amol phosphotyrosine/well (white 384-well
Sensitivity	plate)
Disponsing	plato)
Dispensing	C. to 004 well plates
Plate types	6- to 384-well plates
No. of dispensers Syringe size	None, one, or two 1 mL (standard), 5 mL (optional)
Dispensing	2–5000 μL, in 1 μL increments (1 mL syringe)
volume	5–25000 μL, in 5 μL increments (5 mL syringe)
Accuracy	<1 μL with 50 μL (0.4 mm tip), <0.2 μL with 5 μL
, and the second second	(0.25 mm tip)
Precision	<1 μL with 50 μL (0.4 mm tip), <0.25 μL with 5 μL
	(0.25 mm tip
Dead volume	Reagent loss <100 μL, total tubing volume <800 μL
Incubator and sha	aker
Temperature	From ambient +4°C to 45°C
range	
Shaking type	Orbital
Integrated gas mo	odule
CO ₂	0.1–15%
concentration	
range	0.004 + 504 0.0
CO ₂ concentration	±0.3% at 5% CO ₂
stability	
O ₂ concentration	1–21%
range	2170
O, concentration	±0.3% at 1% O ₂
stability	2
General Features	
Measurement	Endpoint, kinetic, spectra, multipoint and kinetic
modes	spectra
Measurement	Reads a 96-well plate in 15 sec, a 384- well plate in
	45 sec, and a 1536-well plate in 135 sec (minimum
	times)
Interface	PC software (Skanlt Software)
Dimensions (D x	58 x 53 x 51 cm (23 x 21 x 20 in.)
W x H)	

Find out more at thermofisher.com/platereaders

Dynamic range >7 decades

