

Technical specifications for the Fluoroskan, Luminoskan, and Fluoroskan FL microplate readers

	Fluoroskan	Luminoskan	Fluoroskan FL
Fluorometry			
Excitation wavelength range	320–700 nm		320–700 nm
Emission wavelength range	360–800 nm		360–670 nm
Excitation filters	Up to 8 filters in the excitation filter wheel; 355 nm and 485 nm filters included as standard. Other filters available upon request.		Up to 8 filters in the excitation filter wheel; 355 nm and 485 nm filters included as standard. Other filters available upon request.
Emission filters	Up to 8 filters in the emission filter wheel; 460 nm and 538 nm filters included as standard. Other filters available upon request.		Up to 6 filters in the emission filter wheel. 460 nm and 538 nm filters included as standard. Other filters available upon request.
Sensitivity	2 fmol fluorescein/well in a black 96-well plate		2 fmol fluorescein/well in a black 96-well plate
Dynamic range	>6 decades		>6 decades
Luminometry			

Spectral range		270–670 nm	270–670 nm
Sensitivity		10 amol ATP/well using flash reaction, white 384-well plate	40 amol ATP/well using flash reaction, white 384-well plate
Dynamic range		>6 decades	>6 decades
Luminometric filters		Up to 6 luminometric filters in the filter wheel. All filters available upon request.	
Dispensing			
Number of dispensers	Up to 3*	Up to 3*	Up to 3*
Dispensing volume	4–995 µL in 1 µL increments	4–995 µL in 1 µL increments	4–995 µL in 1 µL increments
Dispensing speed	30 s, 96-well plate, 5 µl/well	30 s, 96-well plate, 5 µl/well	30 s, 96-well plate, 5 µl/well
General features			
Plate types	6- to 384-well plates	6- to 384-well plates	6- to 384-well plates
Measurement speed	18 s, 96-well plate 60 s, 384-well plate	18 s, 96-well plate 60 s, 384-well plate	18 s, 96-well plate 60 s, 384-well plate
Wavelength selection	Filters	Filters	Filters

Light source	Quartz-halogen lamp		Quartz-halogen lamp
Detector	Photomultiplier tube	Photomultiplier tube	Photomultiplier tube
Incubator	From ambient + 3°C to 45°C, at ambient 25°C	From ambient + 3°C to 45°C, at ambient 25°C	From ambient + 3°C to 45°C, at ambient 25°C
Plate shaking	Orbital	Orbital	Orbital
User interface	PC software (SkanIt software)	PC software (SkanIt software)	PC software (SkanIt software)
Computer interface	USB 2.0	USB 2.0	USB 2.0
Dimensions (H x W x D)	340 x 420 x 420 mm 13.4 x 16.5 x 16.5 in.	340 x 420 x 420 mm 13.4 x 16.5 x 16.5 in.	340 x 420 x 420 mm 13.4 x 16.5 x 16.5 in.
Weight	Basic unit 21 kg (46 lb) 2 optional dispensers add 2.4 kg	Basic unit 20.5 kg (45 lb) 2 optional dispensers add 2.4 kg	Basic unit 21 kg (46 lb) 2 optional dispensers add 2.4 kg