



Specifications **NOTE:** Technical specifications are subject to change without notice.

Fluorescence Photometric Performance

Wavelength range (Excitation/Emission)	250–850 nm
Wavelength selection	Scanning monochromator tunable in 1-nm increments
Wavelength bandwidth	9 nm
Wavelength accuracy	$< \pm 2.0$ nm
Calibration	Self calibrating with built-in fluorescence calibrators
Sensitivity (signal 3X STD DEV of baseline)	2.0 fmol/well FITC

Time-Resolved Fluorescence Photometric Performance

Data collection	50–1450 μ sec
Integration start/end	User selectable in 200- μ sec intervals
Sensitivity (signal 3X STD DEV of baseline)	0.5 fmol/well Eu-chelate (obtained with DELFIA reagent from Wallac Oy using a 384-well plate)

Luminescence Photometric Performance

Wavelength range	250–850 nm
Sensitivity (signal 3X STD DEV of baseline)	10 amol/well Alkaline Phos. (obtained with Emerald II reagent from Tropix, Inc.)

General Photometric Performance

Microplate formats	6, 12, 24, 48, 96, 384
Light source	Xenon flash lamp (1 joule/flash)
Average lamp lifetime	2 years normal operation (estimate)
Detector	Photomultiplier (R-3896)
Read time	96 wells in <27 seconds (measurement type may extend read time)
Dynamic range	6 decades in 96-well black plates; auto PMT circuitry
Shaker	Time 0–999 seconds
Temperature control (chamber)	Ambient +4°C to 45°C



General Photometric Performance *(continued)*

Sample evaporation control	90% RH compartment
Sample temperature uniformity (including evaporative)	0.5°C @ 37°C (well to well)
Ramp up to 37°C	<30 minutes

System Validation

Internal standards for fluorescence and wavelength

Software

Windows 95/98/NT/2000 compliant
Macintosh OS FAT

Environmental

Robot ready	Yes
Turn-on time	<5 min. to rated accuracy
Operating conditions	15 to 40°C
Operating humidity	0 to 90% RH non-condensing
Storage temperature	-20 to 65°C

Physical

Size (h × w × d)	13.5" (340 mm) × 16.5" (420 mm) × 16.5" (420 mm)
Weight	35 lb (16 kg)
Power consumption	230 VA maximum
Line voltage and frequency	90–240 VAC, 50/60 Hz