

Gemini XPS Reader optics. The optics of the Gemini XPS Reader are engineered for superior performance and reliability.



Streamline GLP/GMP compliance. The SpectraTest FL1 Validation Test Plate provides a complete solution for validating optical performance of the Gemini XPS reader.

Plate stacker and robot integration

The Gemini XPS Reader can be integrated with Molecular Devices' StakMax® Microplate Stacker in a matter of minutes and begin reading microplates with seven mouse clicks. For a higher degree of automation, the Automation Vendor Partners Program has streamlined the integration of our microplate reader systems with all leading partner robots. The "out-of-the-box" automation solution saves up-front integration time and resources.

Leading data analysis software

SoftMax Pro Microplate Microplate Data Acquisition and Analysis Software provides flexibility in experimental design, setup, analysis and reporting, providing the opportunity to customize assays. Choose from nine different curve-fitting routines and use default data reduction, or set up custom formulas for analysis. Data can be analyzed and combined from different plates.

Applications

- Live/Dead viability/cytotoxicity assays
- Detection of nucleic acids
- Green fluorescent protein
- NanoOrange protein quantitation
- PicoGreen DNA detection
- Molecular beacons
- Caspase-3
- Fluorometric protease assays
- cAMP detection



Gemini XPS Reader scans. Well scans from the Gemini XPS Reader illustrating serial dilution of CHO cells using the Live Cell assay from Molecular Probes Live/Dead (Calcein AM /Ethidium Homodimer-1) assay kit. A Costar 24-well tissue culture plate with col1 = blanks and doubling cell concentration left to right starting at Col. 2 with 1000 cells.

Specifications

Fluorescence photometric performance specifications	
Dual monochromators	1 nm increment selection
EX wavelength range	250–850 nm
EM wavelength range	360–850 nm
Wavelength bandwidth (EX, EM)	9 nm
Detection limit (signal 3X SD of baseline)	3.0 fmol/well FITC 200 μL in 96 wells
Time-resolved fluorescence specifications (secondary mode)	
Wavelength range	360–850 nm
Data collection	50–1450 µsec., 200 µsec. increments
Sensitivity	0.5 fmol/well Eu-chelate (obtained with DELFIA reagent from Perkin Elmer by using a 384-well plate)
Luminescence specifications (secondary mode)	
Detection limit	10 amol/well alkaline phosphatase 200 μL/well (obtained with Emerald II reagent from Applied Biosystems)
General photometric performance specifications	
Plate formats	6, 12, 24, 48, 96, 384 wells
Light source	Xenon flash lamp (1 joule/flash)
Detector	Photomultiplier (R-3896)
Read time*	96 wells < 15 sec., 384 wells < 45 sec.
Shaker time	0 to 999 seconds
Temperature range	Ambient +4°C to 45°C
General specifications	
Dimensions (in.)	8.6 (H) × 22.8 (W) × 15 (D)
Dimensions (cm)	22 (H) × 58 (W) × 38 (D)
Weight	35 lbs. (15.9 kg)
Power consumption	< 125 watts
Power source	100–240 Vac, 3 A, 50/60 Hz
Robot compatible	Yes

* Measurement type may extend read time.