



**MOLECULAR
DEVICES**



SpectraMax Mini

Multi-Mode Microplate Reader

Make your first move with confidence



SpectraMax Mini Multi-Mode Microplate Reader

Affordable multi-mode microplate reader with best-in-class data analysis software

The SpectraMax® Mini Multi-Mode Microplate Reader offers a budget-friendly solution that gives you exactly what you need when you need it. With three modes of detection for full spectrum absorbance, fluorescence and luminescence, the SpectraMax Mini reader is user upgradeable—from 2 to 3 modes, providing researchers with a versatile instrument that does not compromise on sensitivity or performance. Included SoftMax® Pro Software enables rapid data generation and analysis, helping you achieve more in less time.

Key benefits

- Ease of use to save time on training, data generation, and data analysis, for faster results
- Superior data analysis with best-in-class SoftMax Pro Software, offering pre-configured protocols for the most commonly used applications
- Flexibility with plate types from 6- to 384-well formats; up to three modes of detection measuring absorbance with fluorescence, luminescence, or both

Everything you need to run your most crucial applications quickly and easily

Access your favorite applications, including ELISA, DNA and protein quantitation, cell viability, gene expression, and more with a compact, upgradeable microplate reader that does everything you need and lets you add detection modes in the future.

The SpectraMax Mini reader provides tunable absorbance, filter-based fluorescence and luminescence, temperature control, and easy analysis and data export with SoftMax Pro Software.



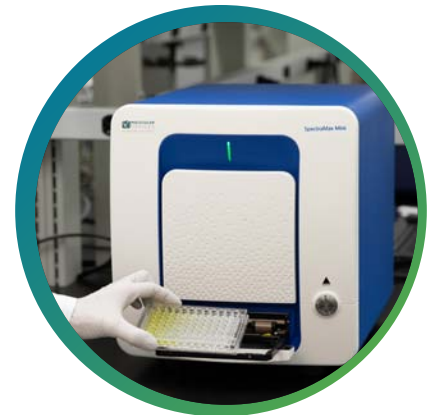
Key features



Best-in-class data analysis with SoftMax Pro



Versatile multi-mode detection



Uncompromised performance

It's as easy as 1-2-3



1

Set up



2

Analyze data

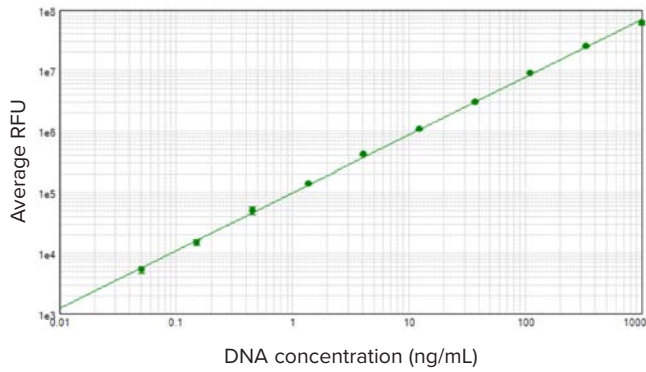


3

Get results

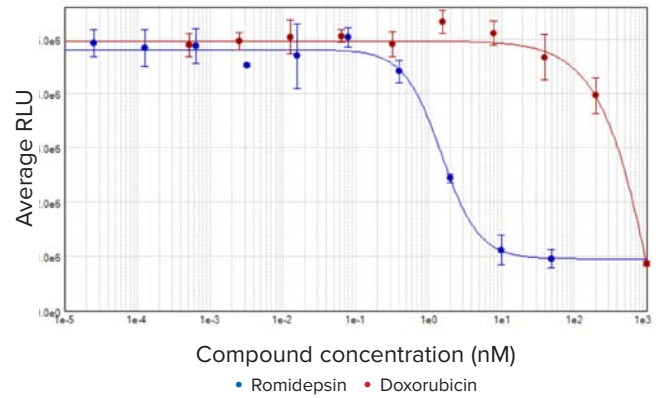
Fluorescent DNA quantitation

Determine DNA concentrations precisely and accurately over a wide dynamic range



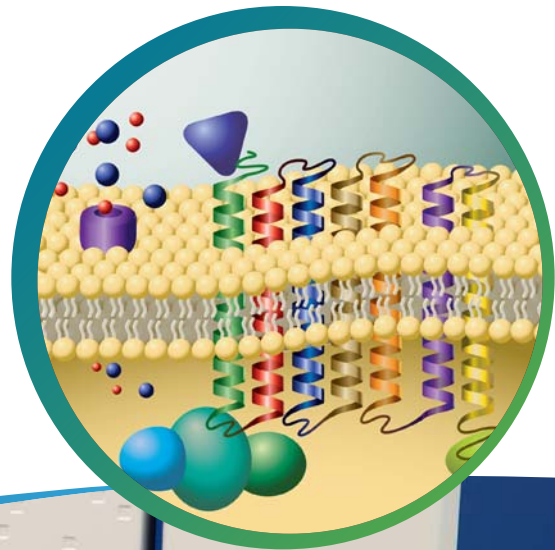
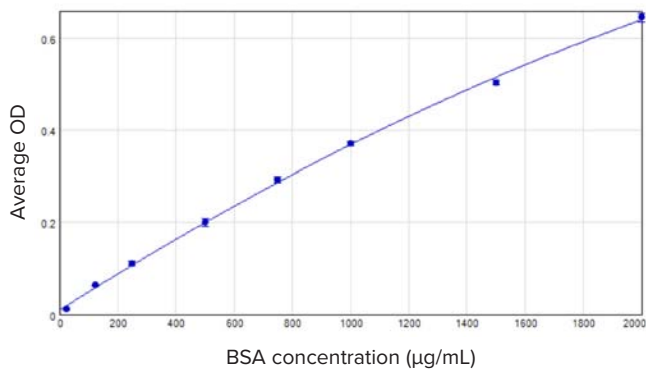
Cell viability

Easily measure cell viability with a luminescence readout



Protein quantitation

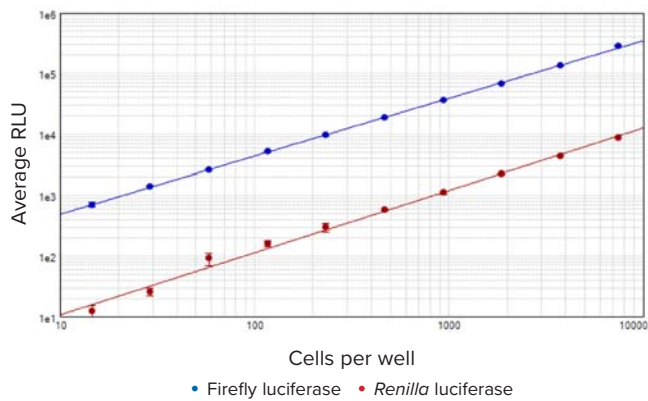
Determine protein concentrations in cell lysates and more





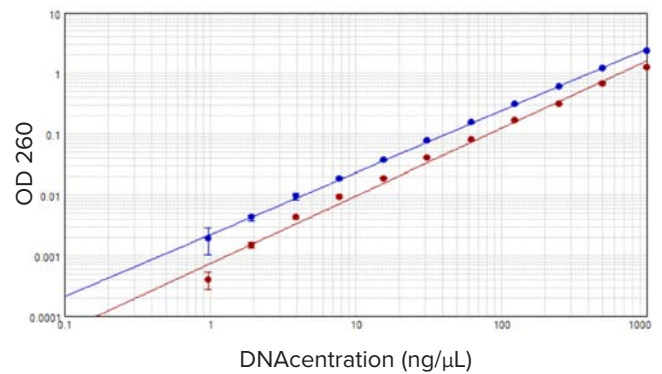
Reporter gene assays

Assess firefly and *Renilla* luciferase activity over a broad range of cell numbers and expression levels



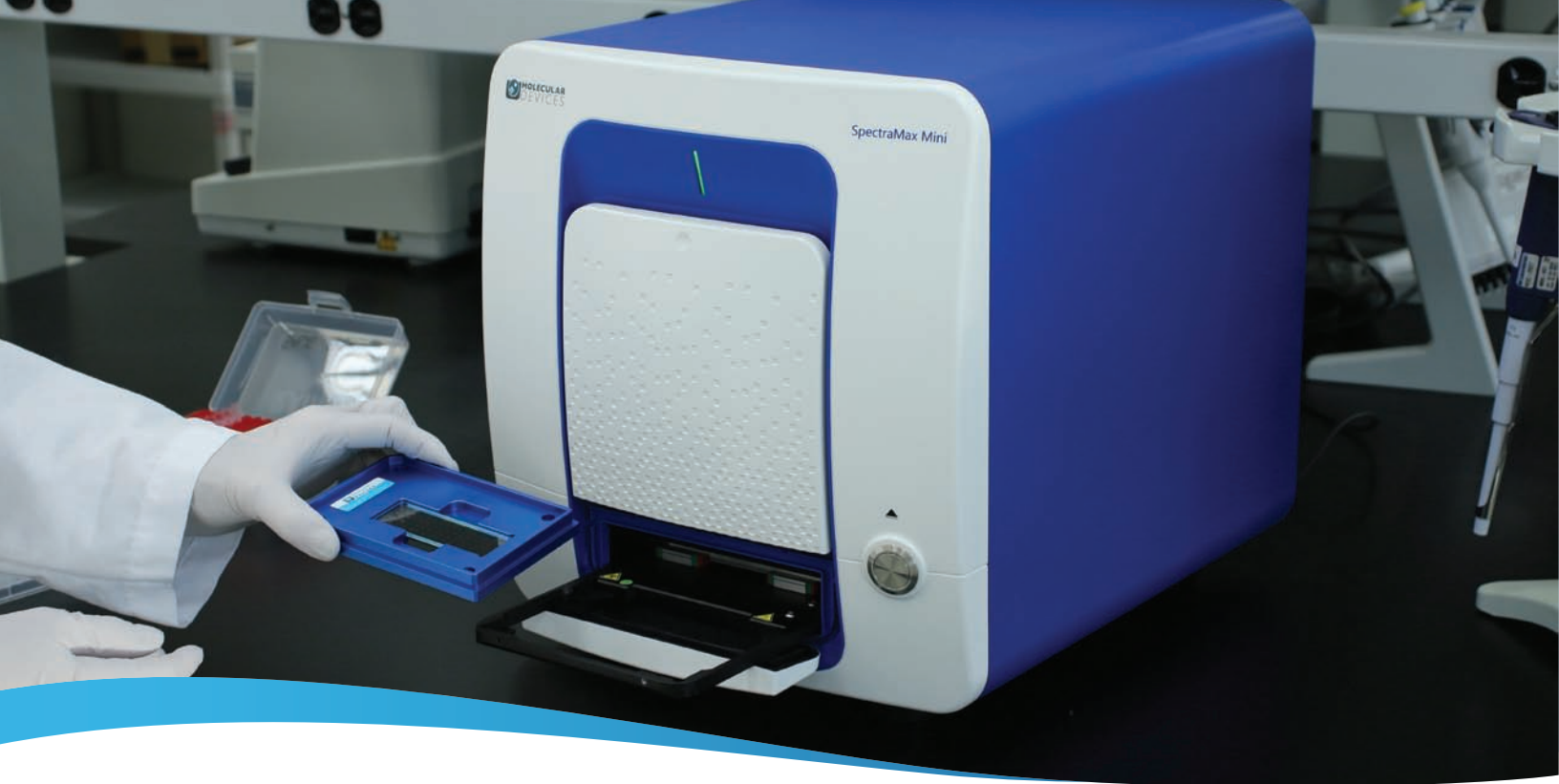
Low-volume DNA quantitation

Accurately measure DNA from 2 ng/ μ L in as little as 2 μ L with the SpectraDrop™ Micro-Volume Microplate



Smaller, faster, quantitation of DNA, RNA, and protein with SpectraDrop Micro-Volume Microplate





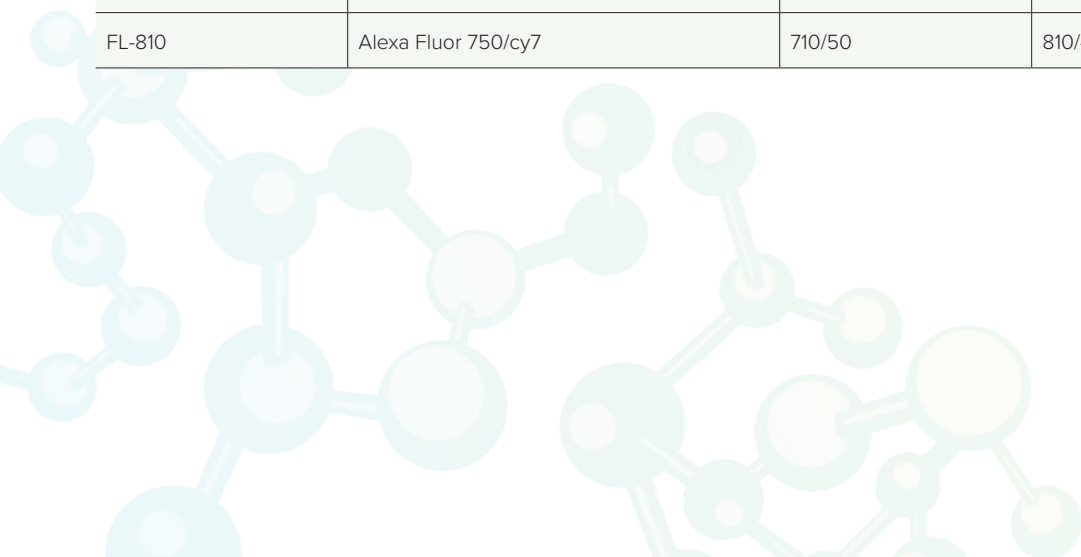
Filter Cubes

Standard Filter Cubes

Filter Name	Fluorophore/assay	Excitation	Emission	Dichroic
FL-465	Coumarin derivative (AMC), AF350	360/35	465/35	405
FL-535	Fluorescein/FITC	485/20	535/25	508
FL-595	Alamar blue	535/25	595/35	555

Optional Filter Cubes

FL-360	Tryptophan	280/20	360/35	310
FL-565	Nano orange/Quant IT protein assay	465/35	565/30	508
FL-635	Alexa Fluor 594, Texas Red	590/20	635/25	610
FL-680	Alexa Fluor 647/cy5	625/35	680/20	655
FL-810	Alexa Fluor 750/cy7	710/50	810/40	765



Technical specifications – SpectraMax Mini reader

General specifications

Dimensions (in.)	15.75 (L) x 12.60 (W) x 13.78 (H)
Dimensions (cm)	40 (L) x 32 (W) x 35 (H)
Weight	≤ 40 lbs (18 kg)
Power requirement	External 24V DC power supply compatible with 100–240V AC @50–60 Hz 160W maximum consumption
Robotic compatible	Yes

General performance

Plate formats	6, 12, 24, 48, 96, 384-well plates ANSI/SLAS
Light source	Two high energy xenon flash lamps
Reading capabilities	Microplates, cuvettes (via adapter)
Detectors	Ultra-cooled Photomultiplier Tube and Silicon photodiode
Shaking	Linear, orbital, and double orbital
Temperature control	4°C above ambient to 45°C
Temperature uniformity	±1°C at 37°C
Temperature accuracy	±2°C at 37°C
Spectral scanning	Abs
Endpoint reading	Abs, FI, Lum
Kinetic reading	Abs, FI, Lum
Well scanning	Over 20 by 20

Absorbance photometric performance

Wavelength range	200–1000 nm
Wavelength selection	1.0 nm increments
Wavelength bandwidth	≤ 5 nm full width half maximum
Wavelength accuracy	± 2 nm across wavelength range
Wavelength precision (repeatability)	± 0.2 nm
Photometric range	0–4.0 OD
Photometric resolution	0.001 OD
Photometric accuracy, linearity	< ±0.006 OD ±1.0%, 0–3 OD
Photometric precision (repeatability)	< ±0.003 OD ±1.0%, 0–3 OD
Stray light	≤ 0.05% at 230 nm

Fluorescence intensity performance

Wavelength range	250–850 nm
Dynamic range	> 6 decades
Sensitivity (fluorescein)	1 pM

Luminescence performance

Wavelength range	300–650 nm
Dynamic range	> 7 decades
Sensitivity (ATP)	2 pM
Cross-talk	<0.1% (white 96-well half-area microplate)

