

The Plate CHAMELEON™ V multitechnology plate reader provides a uniquely broad application spectrum for research and diagnostic purposes. All models are based on the same platform, which allows customizing and upgrading as necessary.

Plate CHAMELEON™ V deliveries include MS Windows® based MikroWin 2000 Lite software for reader control. The software is upgradeable to 21 CFR part 11 compliant MikroWin 2000 data reduction software.

Applications & Models

LIQUID SCINTILLATION COUNTING

Cell Proliferation
Receptor ligand binding
Cytotoxicity
Filter based assays

LUMINESCENCE

Reporter gene assays
BRET
Dual luciferase assays
Toxicology
Free radicals

FLUORESCENCE INTENSITY

DNA hybridizations
FRET
Fluorescence immunoassays
Apoptosis
SNP analysis

TIME-RESOLVED FLUORESCENCE

TR-FRET
LANCE™
Lanthascreen™
Protein-protein interactions
Ion channels in living cells

FLUORESCENCE POLARIZATION

Homogeneous receptor ligand studies
DNA-protein interactions

ABSORBANCE

DNA quantification
& purity 260/280 nm
ELISA
Enzyme assays
Protein quantification

MODELS:

- ▶ 425-106 Plate CHAMELEON multitechnology reader
- ▶ 425-156 Plate CHAMELEON FI-TRF-FP-Abs-Lum reader
- ▶ 425-146 Plate CHAMELEON Lum-LSC reader



Plate CHAMELEON™ V is readily accessible by most robotic arms due to new plate insert position with automatically opening lid.



20 fluorescence, absorbance and /or luminescence filters in easy-to-change filter slides. Detection of plates up to 384 wells in all modes.

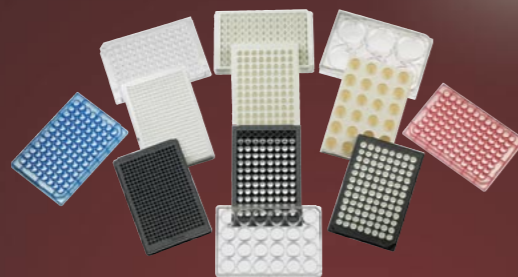
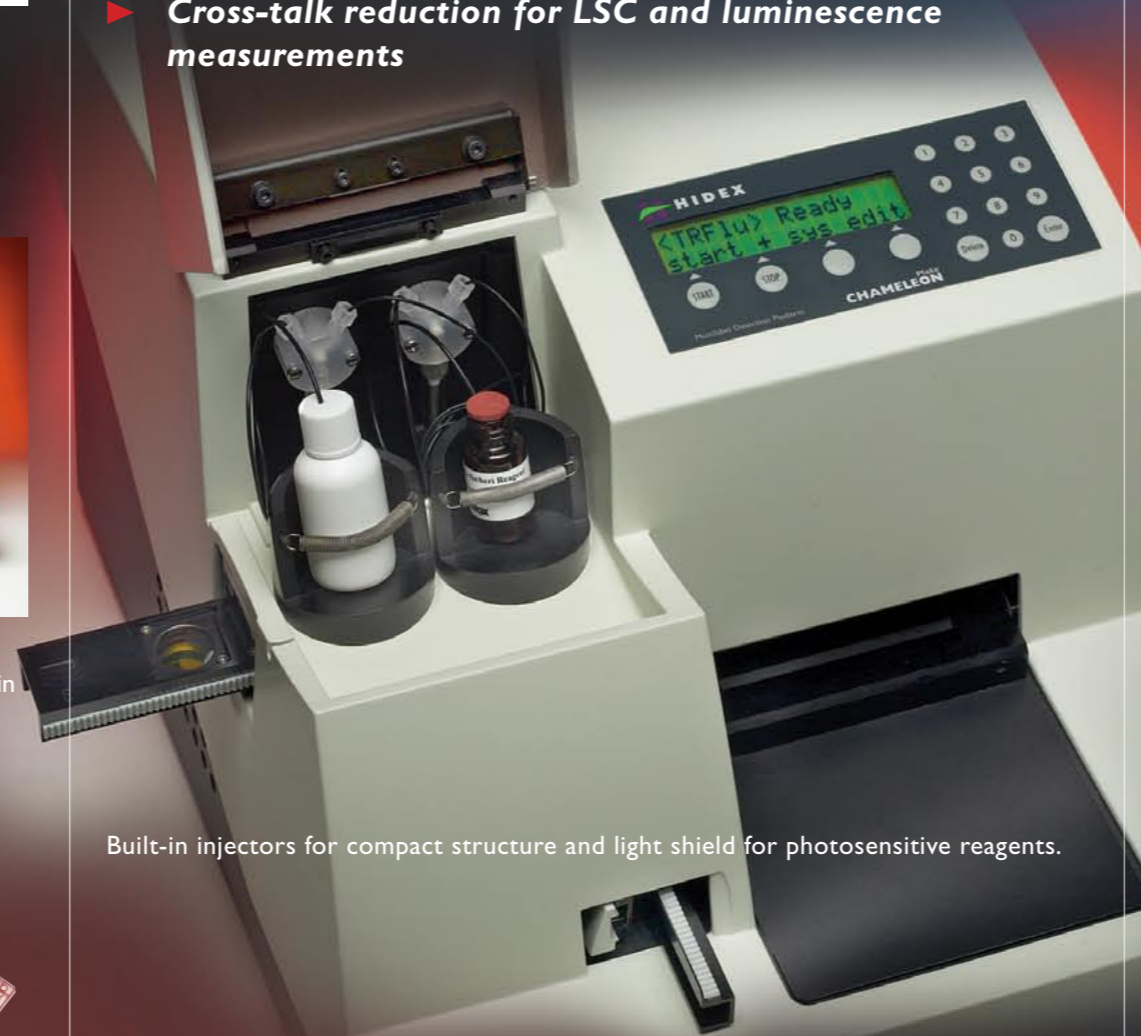


Plate CHAMELEON™ V

SEVERAL NEW FEATURES INCLUDING :

- ▶ Automation compatibility
- ▶ Built-in injectors
- ▶ 20 pre-programmable filters in easy-to-change slides
- ▶ Detection of 384 well plates in all modes
- ▶ Fluorescence detection wavelength range up to 850 nm
- ▶ Improved performance in all modes
- ▶ Cross-talk reduction for LSC and luminescence measurements



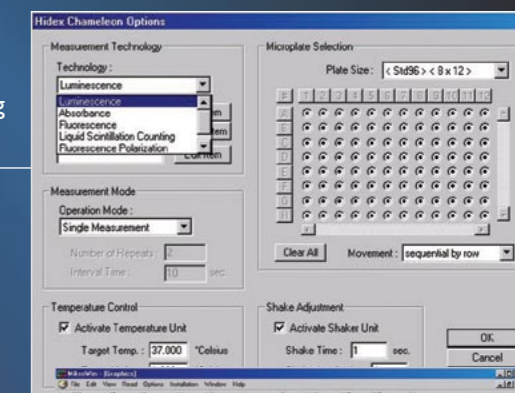
Built-in injectors for compact structure and light shield for photosensitive reagents.

HIGHEST SENSITIVITY IN ALL APPLICATIONS

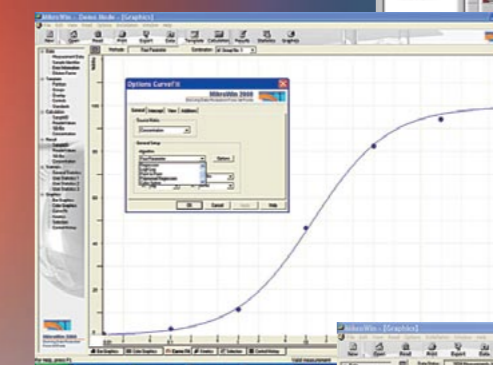
Ingenious optical design with Filtered and Direct Detection Modes facilitates not only the broadest variety of applications, but also highest available sensitivity in all detection modes: TRF sensitivity down to 5 amol Eu/well on optimized measurement conditions, luminescence detection limit less than 1 amol ATP/well and LSC efficiency above 50 % for H-3.

MikroWin Software

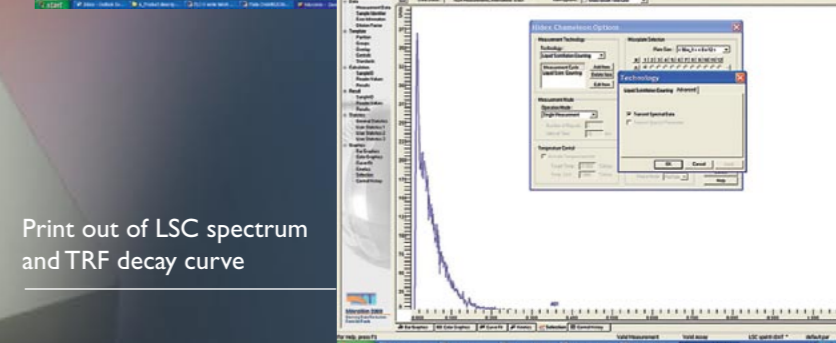
Easy-to-use and flexible control of the reader using MikroWin 2000 software.



MikroWin allows online viewing of wells during kinetic measurements.



Flexible data evaluation, such as various curve fitting options.



Print out of LSC spectrum and TRF decay curve

NEW SOFTWARE FEATURES:

- ▶ Selection of random wells
- ▶ Multiplexing of technologies
- ▶ Kinetic for LSC, TRF and FP
- ▶ Super-sensitive Single Photon Detection in LSC mode
- ▶ Multilabel kinetics
- ▶ Scanning of wells
- ▶ LSC quench curves

You can choose a Plate CHAMELEON V model to meet your application needs. All models are based on the same hardware, but different application modules are available. Thus your Plate CHAMELEON V can be dedicated to LSC applications, or to non-radiometric applications. As a third alternative, to provide a complete spectrum of applications, both the radiometric and non-radiometric modules may be included.



Multilabel detection platform for measurement of both radiometric and non-radiometric labels.

Features and Performance:

Sensitivity

Fluorescence Intensity: < 2 fmol fluorescein/well
 Luminescence: < 1 amol ATP/well
 LSC: Eff. 50 % for H-3, 90 % for C-14 and 74 % for I-125
 TRF: < 20 amol Eu/well
 FP: 5 mP stdev at 1 nM fluorescein
 Abs: Measurement range > 3.0 OD

Measurement modes

Multiple wavelength, endpoint, kinetic and non-equidistance kinetic

Plate types 6 – 384 well ANSI standard plates

Scanning Up to 100 points/well

Shaking Integrated shaker

Wavelength range

Excitation: 190 nm to 900 nm
 Emission: 360 nm 850 nm
 Absorbance: 230 nm to 900 nm

Optics

Direct or Filtered for highest performance in each mode
 Light source: Xenon flash lamp

Detectors Dual-PMT and Si-photodiode

Filters Up to 20 pre-programmable excitation, absorbance filters and up to 20 emission and luminescence filters

Size 30 kg; 37 cm(w), 50 cm(d), 34 cm(h)

Operation Stand-alone or Windows based MikroWin 2000 SW

Data evaluation 21 CFR Part 11 compliant MikroWin 2000 SW with full data reduction capability

Options

Injectors: Up to 2 (built-in), 5 – 1000 µL with 1 µL increments
 Temperature control: Ambient +2°C - 42°C
 Stacker and robot compatibility

Models

425-106 Multitechnology reader
 425-156 FI-TRF-FP-Abs-Lum reader
 425-146 Lum-LSC reader

Hidex supplies high technology products and solutions for biotechnology, life science research and environmental monitoring. Founded in 1993, the company has attracted a multi-disciplinary staff with core competences in designing, manufacturing and marketing of plate readers, liquid scintillation and gamma counters. We enjoy close relations with local universities and research institutes, and take pride in an extensive applications know-how.

Focus areas

Hidex provides measurement instrumentation for a wide range of applications, from life science research to environmental monitoring. Technologies used are based on detection of radioactive, luminescence, fluorescence and photometric labels.

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 Windows is a registered trademark of MicroSoft Corp.
 LANCE is a trademark of PerkinElmer inc.
 Lanthascreen is a trademark of Invitrogen Corp.

Hidex reserves rights to alter the specifications.



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Plate CHAMELEON™ V

For the broadest spectrum of microplate applications:

LSC ♦ FI ♦ TRF ♦ FP ♦ Lum ♦ Abs



Speed and Flexibility with High Performance

