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Hidex Sense Microplate Reader Specifications

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The Hidex Sense is a compact application ready high performance multimode microplate reader featuring 6 detection modes.

The user interface is touchscreen operated with quick access to favorite assays. The software, which is top rated on the international System Usability Scale, is extremely easy to use and assume minimal user training.

- ✓ Touch Screen operated
- ✓ Intuitive – minimal training
- ✓ Application ready
- ✓ Quick access to favorite assays
- ✓ Compact design

The software includes concentration calculation with a wide range of standard curve fitting methods, replicate statistics, absorbance ratio and reference calculation, FRET ratio and FP mP calculation. Results import and export functionality makes it easy to do off-line data handling. All results are stored in the user software database, and can automatically, or at user demand, be exported to Excel after the run for further data handling.

A unique automatic wavelength selection system based on filter technology provides full spectral access, and ensures direct readiness for a wide variety of assays. Absorbance assays are measured utilizing a Spectrograph detector, providing complete spectrum readout in less than a second per sample.

The reader includes temperature control, microplate shaking, versatile functionality for kinetic assays and several other features.

The optional integrated dispensers have true real-time readout for bottom read technologies. The dispenser head features automatic height adjustment to avoid foaming. Direct user access to the dispensing head makes it comfortable to handle for priming and rinsing.

For exceptionally demanding luminescence assays, the optional separate low noise detector gives extreme sensitivity. An automatic detector touch control system moves the detector against the top of the well for best possible detection geometry as well as minimal crosstalk.

The Hidex Sense is also available with a digitally controlled high accuracy gas mixing system for cell viability, hypoxia and other cellular assays. The CO_2 and O_2 concentrations are easily managed from the touch screen.

The Hidex Sense Microplate Reader is very compact, only 8" (20cm) wide. When not in use, the instrument hibernates automatically, saving energy and generating less heat in the environment.

- ✓ Fluorescence Intensity
- ✓ Filter Luminescence
- ✓ High sensitivity Direct Luminescence
- ✓ Absorbance spectrum
- ✓ Time Resolved Fluorescence
- ✓ FRET, TR-FRET
- ✓ Fluorescence Polarization
- ✓ AlphaScreen®
- ✓ Dispensers with direct read
- ✓ Digital gas control

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Specifications Sense 425-301

Detection limits

Fluorometry	< 0.05 fmol / 384 well
Fluorometry (bottom)	< 0.15 fmol / 384 well
Photometry spectral range	220 nm - 1000 nm
Photometry detection range	0 – 4OD
Photometry detection speed	0.3 sec/well (min)
Luminescence (glow)	< 50 amol ATP / 96 well, measurement time 0,1sec-2000sec
Time resolved fluorescence	< 1 amol / 384 well
Fluorescence polarization	< 3 mP SD / 96 well plate

General features

Plate types	1 - 1536 well plates
Shaking	Linear, orbital, double orbital, adjustable intensity
Temperature control	Ambient +2°C to 65°C, ±0.5°C at 37°C
Bottom read	Fluorescence, luminescence, TRF, FP
Automatic focus adjustment	Top 3.5-13,5mm, 1mm steps. Bottom 1-4mm, 300µm steps
Reading speed	~20sec / 96 well plate**
Photometry spectral read	Spectrograph detector
Absorbance sample volume normalization	
Touch screen user interface	

Optional features

Direct luminescence	< 6 amol ATP / 96 well
AlphaScreen®	< 8.0 ng/mL Omnibead™
Integrated dispensers	1 or 2 channels, real time detection (bottom read)
Plate types	1 – 384 well
Injection increments:	1 µL
Injection range	5 µL – 1000 µL (500 µL/stroke)
Precision	< 1% at 100 µL
Accuracy	< 1%
Injection speed	25 µL/sec – 415 µL/sec
Dead volume	100 µL (with back flush)
Gas control	Digital three gas mixer (Input gas CO^2, Air, Nitrogen)
Range	CO^2 0-20%, O^2 0-18%, 0.1% steps
Accuracy	CO^2 ±0.25%, O^2 0.2%

Dimensions

Width	20 cm (8")
Height	28 cm (11")
Depth	49 cm (19")
Weight	< 13 kg (29 lbs)

**) ~11 sec /96 well plate in upcoming software version

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About Hidex

Hidex is a family owned high technology company which develops and manufactures high performance analysis equipment for life science research, nuclear measurement and nuclear medicine markets. Our products utilize modern technology and excellent tradition of workmanship. With strong links to the scientific community we continue to innovate and develop to improve scientific research and safety of everyday life.

Products

HIDEX 300 SL
A very compact automated TDCR Liquid Scintillation Counter featuring absolute activity/DPM without external radioactive standards enabling a wide variety of applications.

Automatic TDCR Liquid Scintillation Counter

Super Low Level TDCR Liquid Scintillation Counter

RADIOWATER GENERATOR
An automated production system for ^{15}O-labelled H_2O for Positron Emission Tomography studies.

TRIATHLER
A single-sample counter, which provides fast and accurate results for several life science and environmental applications, measuring all radioisotopes including tritium in a variety of sample formats.


LSC


Luminometer


Gamma Counter

HIDEX AUTOMATIC GAMMA COUNTER
We are proud to introduce our new automatic gamma counter. The compact design and superior user experience of our touch screen software makes the Hidex Automatic Gamma Counter ideal for Nuclear Medicine, PET and radiation protection work

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