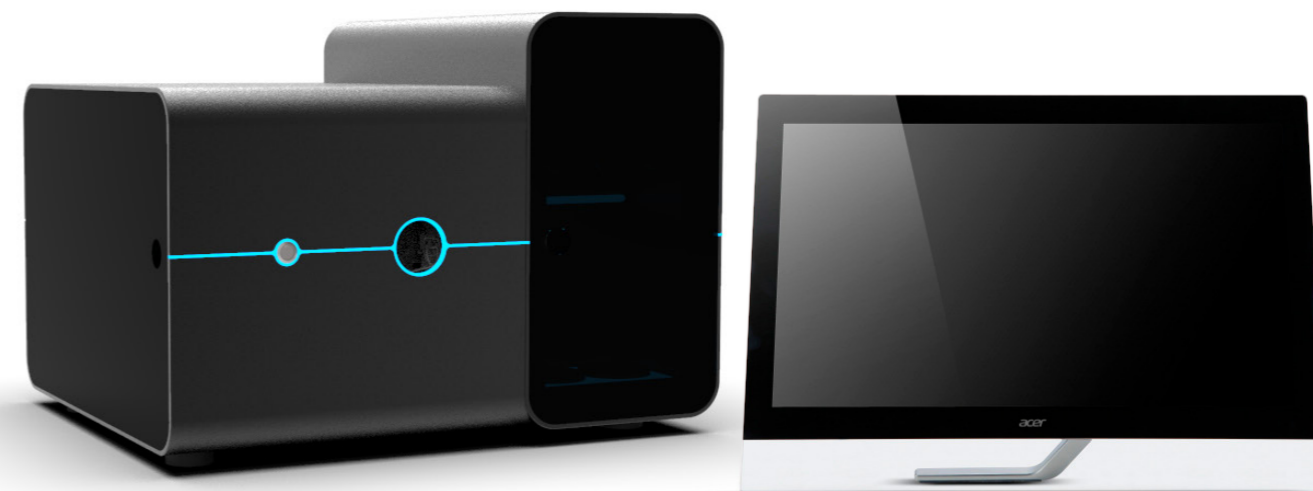


TECHNICAL SPECIFICATIONS



Optics	Magnification 20X and 40X Transmission BFLED Transmitted Light Fluorescence Epifluorescence Channels: DAPI, GFP, TRITC, Cy5, Cy7. Camera Quantum efficiency: 82% (Peak QE) Readout noise (RMS): 2.1 electrons (ms); 1.5 electrons (median) Dynamics range: 20,000 : 1
Fluidics	Disposable Microfluidic Chips. Service Bottles: waste management, fluidic priming, and automated sterilization/cleaning Software assisted management for service bottle and falcon tubes Support for simultaneous use of three falcon tubes
Hardware	PC integrated Monitor touch screen 23" Keyboard and mouse Integrated temperature and atmospheric controller Customized gas mixture
Software	Proprietary CELLviewer Software Fluidic adaptive focus Image analysis: Fluorescence intensity and time-lapse measurement Automatic report generation. Advanced Image and video editing Cloud Data Storage
Installation requirements	Dimensions: 60 X 50 X 40 cm (W X D X H), Weight: 45 kg Environmental condition: for indoor laboratory use Operating temperature: 15° - 30°C Power: 110 - 230 VAC, 50/60 Hz



CELLviewer

FLOATING 4D BIOLOGY

CONTACTS

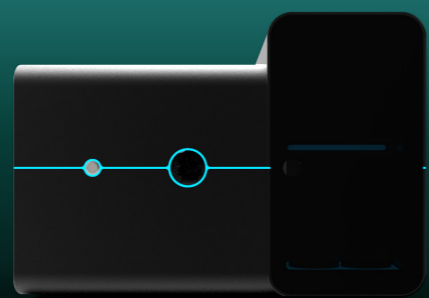
For further informations and place an order

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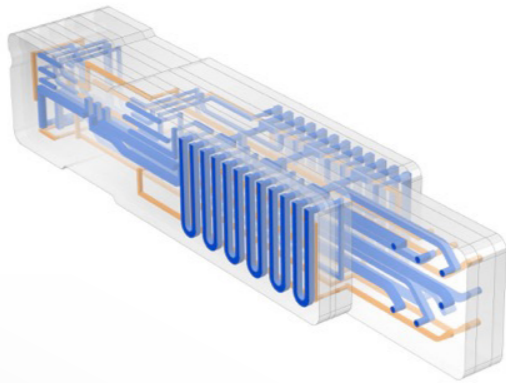


The system

CELLviewer is a benchtop Lab-on-Chip platform that supports cell culture and live imaging in a streamlined workflow. Featuring optics, software and microfluidics to isolate and analyze cell suspensions, the system also includes fine environmental control of temperature, gas and nutrients to sustain live cells for long term observations. Its optical configuration guarantees high image quality in multicolor epifluorescence imaging with low photodamage. With an easy-to-use software interface the scientist designs custom experimental protocols, performs downstream image analysis and generates test report and movies.

Automated workflow, reproducible results

CELLviewer generates reproducible data to be inter-operator and inter-laboratory comparable. Automatic liquid handling reduces hands on operator time for error-prone manual steps. Through an intuitive user interface, scientist designs custom hands free protocols and real-time changes parameters during the test.



The circuit

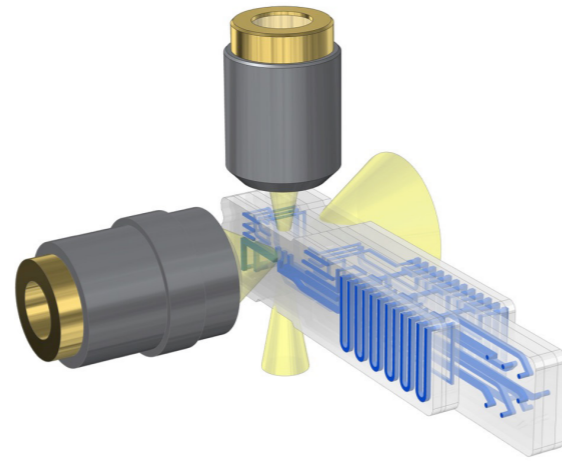
CELLviewer cartridge is a sophisticated microfluidic PDMS circuit with 3 parallel analysis chambers. The chip lets you isolate and observe individual cells or cell aggregates in a size range of 8-300 μm . With gentle microfluidics, negligible shear stress is exerted on cells even when they are 3D displaced for autofocus.

Design the right environment

Work in a contamination free zone with a fine control of temperature, atmosphere and nutrient dispensing: the best way to perform long term experiments on live samples.

Fluidic adaptive focusing

Forget the knobs! CELLviewer hybrid technology integrates microfluidics, optics and AI software for sample 3D auto-focusing with forecast of its position 20 seconds in advance.

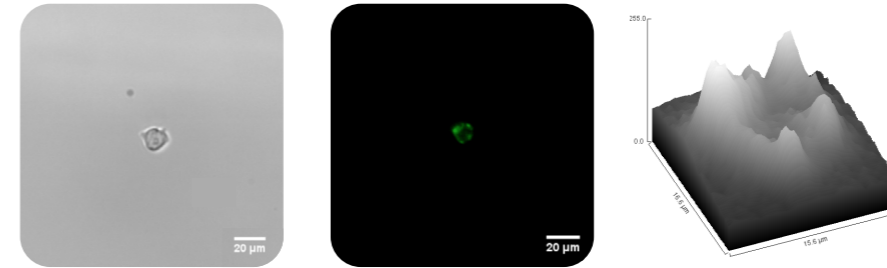


Fluorescence imaging: high speed, top quality

LED stroboscopic light source coupled with singleband excitation filters reduces photodamage while preserving sample viability for long term experiments. High speed acquisition is achieved through multiband beamsplitter and emission filter setup, that reduce mechanical switch required. 5 fluorescence channels are provided to execute multicolor widefield imaging.

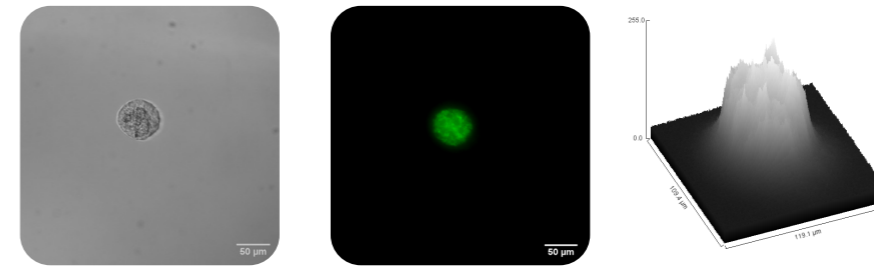
APPLICATIONS

Single cell analysis. Explore and discover cell-to-cell heterogeneity.



Single Jurkat cell DiOC6 labelled is cultured for 2,5 hours in CELLviewer cartridge and time-lapse imaged (Optics: 20X). A: Brightfield acquisition. B: GFP-channel acquisition. C: 3D spatial distribution of DiOC6 fluorescence signal with ImageJ software. Scale bar: 20 μm

Spheroids & 3D cell culture. Sewing all discrepancies between in vitro and in vivo models.



HOS spheroid DiOC6 labelled is cultured for 2 hours in CELLviewer cartridge and time-lapse imaged (Optics: 20X). A: Brightfield acquisition. B: GFP-channel acquisition. C: 3D spatial distribution of DiOC6 fluorescence signal with ImageJ software. Scale bar: 50 μm