

zenCELL owl

24 channel Microscope



zenCELL owl **EXPERIENCE & EXPERTISE**

Remote, automated microscopy for the incubator

The zenCELL owl is a 24-camera microscope for fast and automated live cell microscopy. Its compact design and stability, even above room temperature, make it ideal for the use as an incubator microscope.

Flexible and compact

The modular design allows flexible configurations to guarantee a suitable and safe analysis of biological samples.

The small footprint in the incubator leaves enough space for further cell cultures or zenCELL owl systems.

Perform simultaneous cell culture monitoring

Analyse cell confluence and morphology of up to 24 wells simultaneously and compare individual wells at the same time to raise the validity and reproducibility of your experiments.

The zenCELL owl is compatible with standard culture vessels.

Automate routine applications

Let zenCELL owl record and analyse your cell cultures. Just set up the experiment and walk away. Check your cell cultures and data analyses anytime from anywhere without going into the lab and save time for other tasks.

Perform long term measurements over time periods of a few hours up to many days.

The zenCELL owl is easy to clean and disinfect and requires almost

Robust and easy to clean

no maintenance due to the absence of mechanical parts or rustprone screws. Its robust design and USB power supply also make it the perfect tool for field use and mobile laboratories.

Leave your cells where they belong - in the incubator

Your cell cultures and zenCELL owl can remain in the incubator during the complete experiment. Active user interventions are avoided, e.g. for manual microscopy. This prevents fluctuations of the environmental conditions like temperature and CO₂ and lowers the risk of contamination. Measurement results can be clearly traced back to the behaviour of the cells at optimal culture conditions. Special settings such as hypoxia can be tested as experiments can be performed under defined conditions.

Software

The software provides integrated image processing algorithms to support continuous long term cell culture monitoring and provide fast and accurate information about the current state of the sample to be observed. This includes real-time data analysis that provides information on the current cell count and confluency.

Start your project and capture the images of your cell culture at your individual frequency, create a time-lapse video and export a data set for your scientific work.

Applications for your cell culture include:

- Documentation and determination of cell growth.
- Determination of cell confluence.
- Analysis of drug effects on cell culture (e.g. cytotoxicity tests).
- Biocompatibility testing.
- Observation and QC of stem cells.
- Migration assays.

Capture the smallest detail

24/7 long term measurement and automated data acquisition increase the validity of your assay by rising the number of tracked and analysed data points.

You never miss a data point due to real-time continuous monitoring. Zoom down to cell level, capture high quality photos or create time-lapse videos. Track and analyse data time-resolved. Analyse dynamic chances and developments of your cell culture retrospectively and in detail.

Let the software do your job

Algorithms evaluate the confluence of each picture and estimate changes in the relative cell number objectively and in real time. This creates consistent, reproducible and reliable results with no subjective scope of interpretation. Compare mean values and standard deviations of individually selected wells.



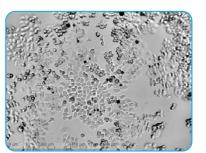
Automate multiple assays

- Evaluate the cytotoxic effect of different agents on up to 24 cell cultures simultaneously and in long-term.
- Automatic and around the clock data capturing enables analysis of every time-point of your cytotoxicity assay retrospectively and in detail.
- Observe changes in morphology and confluence online from outside the lab.

The zenCELL owl helps you to raise validity and reproducibility with lower efforts.

Compare different drug effects under identical conditions

- Create defined and stable environmental conditions and keep the cell cultures in the incubator
- Analyse dynamic changes on single cell level and create time lapse videos for your documentation.
- Compare different drugs or different drug concentrations under identical environment conditions in an automated non-invasive way.



Dynamic data acquisition for dynamic processes

With conventional manual microscopy it is not possible to analyse each dynamic change which happens on cell levels at any time. The zenCELL owl records pictures in intervals of 10 minutes of every cell movement in detail – also during long-term analyses.

Wound healing speed – accurately calculated

- Observe and control every time-point and step of the wound healing process retrospectively and in detail.
- Calculate the speed of wound healing by analysing the increase of confluence in the gap area.

Parallelise 24 migration assays under identical conditions

The simultaneous analysis of cell morphology and confluence in up to 24 wells under identical conditions optimises the comparability of your results and reproducibility of data.

Cell Culture Monitoring

The software provides integrated image processing algorithms to support continuous long term cell culture monitoring and provide fast and accurate information about the current state of the sample to be observed. This includes real-time data analysis that provides information on the current cell count and confluency.

Start your project and capture the images of your cell culture at your individual frequency, create a time-lapse video and export a data set for your scientific work.

Service and Support

Users of our systems can benefit from our comprehensive, fully inclusive service and support.

We can give reassurance that if things go wrong or you need expert advice, help is only an e-mail or phone call away.

Validation Services

Our Validation Service enables you to implement and get maximum value from your investments as soon as possible.

We work as a partner with your Quality Manager, System Manager and users to provide a tailored Validation Plan, suited to your needs. Our Validation Specialists who have many years' of experience in GLP system validation, detailed knowledge of our systems, together with other industry standard systems to help you meet company and regulatory requirements.

Training

LabLogic can provide a variety of training courses and workshops to help you get the most out of your instrument and software.

All training is performed by our expert Product and Support Specialists who have many years experience in the development and use of the instruments and software.

Certificates can be provided to complement your internal GLP training records.

Europe & Worldwide LabLogic Systems Limited

Paradigm House, 3 Melbourne Avenue Broomhill, Sheffield, S10 2QJ, UK

E-mail: solutions@lablogic.com Tel: +44 (0)114 266 7267 Fax: +44 (0)114 266 3944

www.lablogic.com





USA & Canada

LabLogic Systems, Inc.

1911 N US HWY 301, Suite 140 Tampa, FL 33619, USA

E-mail: solutions@lablogic.com Tel: +1-813-626-6848 Fax: +1-813-620-3708

www.lablogic.com



