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<b>PRODUCT DATA SHEET</b>	<b>zenCELL owl</b>			



### Purpose:

Monitor your cell cultures in real-time with 24 miniature microscopes that observe your assay from inside the incubator

### Application examples:


- Documentation and analysis of cell growth
- Continuously determination of cell confluency
- Analysis of component effects on cell cultures (e.g. cytotoxicity or biocompatibility)
- Migration or Scratch assays
- Stem cell observation
- Spheroid growing and monitoring under stable conditions

### Features:

The zenCELL owl is designed to capture brightfield images of your cell cultures at a frequency of your preference while simultaneously conducting analyses for cell coverage and cell number. Additionally, it offers the flexibility of digital phase contrast. The acquired dataset can be efficiently organized within the zenCELL owl's software, allowing for sorting and graphing. Alternatively, you have the option to export the dataset for use with other methods, streamlining the data organization process for scientific studies.

By facilitating parallelized experiments and the generation of robust datasets, the zenCELL owl enhances reproducibility in your research endeavors. This innovative approach not only simplifies data management but also ensures that your experimental outcomes are reliable and readily accessible, contributing to the overall efficiency and credibility of your scientific studies. With a compact footprint roughly the size of a standard cell culture plate, the zenCELL owl optimizes incubator space, providing ample room for additional cell culture ware or multiple systems. This feature enables parallel usage with other experiments, enhancing efficiency and flexibility in your laboratory setup. The completely enclosed housing is sterilizable using Isopropanol or other common disinfectants for wipe cleaning, ensuring a sterile environment.

Unlock the potential for a diverse range of applications and enjoy continuous cell monitoring with the zenCELL owl. Its space-saving design and versatile sterilization options make it an ideal choice for seamlessly integrating into your laboratory workflows.

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## Technical data

### General technical data

System Requirements	Windows® 7, 8, 10, or 11 (32/64 Bit, 2.5 GHz 4 cores, 8 GB RAM)
Interface (power supply, data exchange)	1x USB 3.0
Magnification	10 x
Field of view	1.2 mm x 0.9 mm
Image Resolution	5 MP
Display resolution per microscope	2592 x 1944 pixels
Software incl. Algorithms	Cell coverage Cell number (fibroblasts)
Measuring rate / Adjustable recording interval	5 min.* – 24 h.
Image capture	30 s for 24 wells
Export Formats	Picture: PNG, BMP, JPEG/JPG Dataset: CSV
Light Source	LED
Camera	5 MP CMOS
Optical Filters	No Filters
Operating Temperature	20°C - 45°C
Humidity -operation	20% - 95% rel.
Storage Temperature	0°C - 50°C
Protection	IP62
Sterilization	Isopropanol Ethanol
Dimension (H x W x D)	105 x 180 x 180 mm
Weight	1050 g
Warranty	1 year

## Equipment

### Scope of delivery

Item name	Item No.
zenCELL owl	310100
➤ Incubator microscope	
➤ USB 3.0 cable	
➤ Universal adapter frame	
➤ Mini-PC	