

Incubator microscope for live cell imaging

zenCELL owl



view your cell culture in real-time
24 mini-microscopes observe your assay inside your incubator

The zenCell owl is a live cell imaging device. It is a real-time incubator microscope system. Inside, 24 mini-microscopes enable a new simultaneous observation of your cell cultures. Take advantage of your own incubator and your laboratory computer. Install the free software, connect the zenCell owl via USB 3.0 and it is ready for use. There is no need for an additional power supply. Create a new Project in the Software, put the cells in their defined conditions and monitor them live from outside on your computer screen.

The zenCell owl creates images of your cell cultures in a frequency of your choice and analyses them for cell coverage and cell number. Different microscopic techniques, like Brightfield, Darkfield and even Digital Phase Contrast are available. You can sort and graph your acquired dataset in the zenCell owl's software or export the dataset and use alternative means at any time, easing the workload of organizing your Data for a Scientific study.

www.zencellowl.com

The small footprint, about the size of a standard cell culture plate, leaves you enough space in the incubator for your other cell culture ware or more systems. This allows you to use it in parallel with other experiments at the same time. The housing is completely closed and sterilizable with Isopropanol or other common medias for wipe cleaning.

Benefit from a wide range of possible applications and monitor your cells continually.

Application examples:

- Documentation and analysis of cell growth
- Comparison and analysis of extracellular conditions (e.g. glucose concentration, pH value or different mediums)
- Continuously determining cell confluence in 24 spots
- Analysing effects of component on cell cultures (e.g. cytotoxicity or biocompatibility)
- Migration or Scratch assays
- Stem cell observation

Technical data

General technical data

System Requirements	Windows® 7,8 or 10 (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
Software incl. Algorithm	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
Sterilizable	Isopropanol Ethanol
Dimension (H x W x D)	105 mm x 180 mm x 180 mm
Weight	1050 g
Warrenty	1 year

* If the minimum system requirement is exceeded, 10 minutes should not be undershot as the smallest adjustable recording interval.

Equipment

Scope of delivery

Item name	Item No.
zenCELL owl	310100
➤ Incubator microscope	
➤ USB 3.0 cabel	
➤ Adapter for 24 well plate	



Equipment	Item No.
Adapter for Eppendorf® 6 Well; 24 Well	315101
Adapter for Greiner Bio-One® 6 Well, 24 Well	315206
Adapter for Falcon® 24 Well	315302
Adapter for Kartell® / TPP® 24 Well	315904
Adapter for Corning® 24 Well	315908
Adapter for Fischerbrand® 24 Well	315402
Adapter for Sarstedt® 24 Well	315501