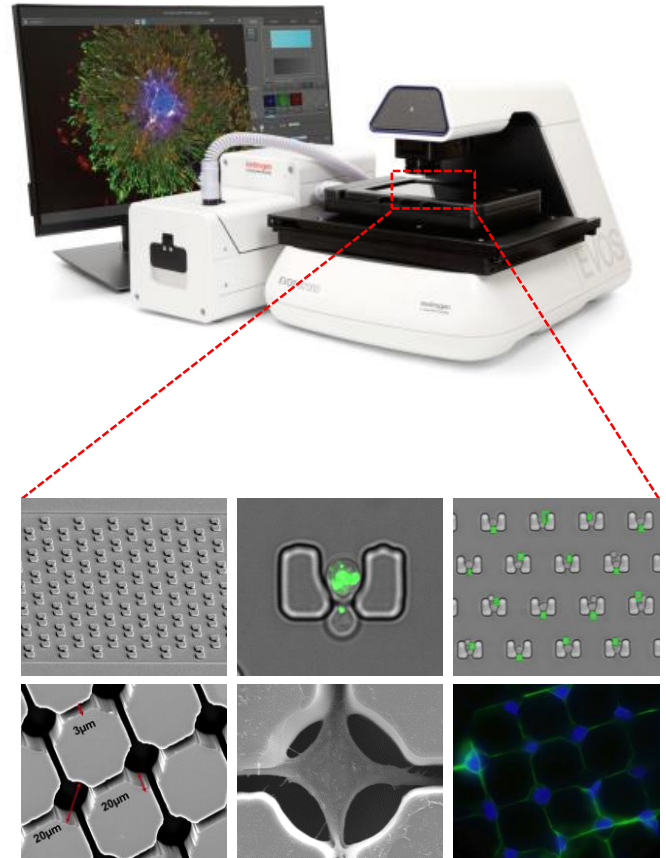


Powerful, Flexible, Intuitive, Fast, and Fully Automated System

Bring high performance and fast, automated imaging right to your lab bench with the A1 Cell Imaging System. This system has been designed with advanced capabilities to simplify demanding cell-based imaging applications such as live-cell analysis, image tiling, and Z-stacking, so you can focus on acquiring images and data rather than instrument operation.

Features

- **Speed** — scan a 96-well plate in 3 fluorescence channels in less than 5 minutes
- **Flexibility** — customize the system with more than 20 user-changeable LED light cubes, dual cameras (monochrome and color), a variety of objectives ranging from 1.25x to 100x, and multiple vessel holders
- **Time-lapse live-cell imaging** — onstage incubator for precise control of temperature, humidity, and gases for normoxic or hypoxic conditions allows a wide range of biological studies under physiological conditions
- **Area view** — move rapidly and seamlessly between single-field mode, low-, and high-magnification scan modes to easily define and capture the area of interest
- **Automation** — time-saving features such as autofocus, rapid stage movement, and automated routines help reduce time to complete experiments, allowing high throughput, high data quality, and improved experimental reproducibility



Microfluidic Devices

iBiochips provides development and manufacturing of customized microfluidic devices based on your desired dimensions and functions.

Onsite installation and training

A dedicated installation and training program will get you up and running in just one day. The dedicated expert comes to your site to provide hands-on workflow training and make sure your lab is quickly enabled to utilize the powerful instrument features to maximize productivity.

A1 Cell Imaging System Specifications

Optics	<ul style="list-style-type: none">• Infinity-corrected optical system; Royal Microscopical Society (RMS) threaded objectives with a 45 mm parfocal distance
Illumination	<ul style="list-style-type: none">• LED light cubes (>50,000-hour life per light cube) with adjustable intensity
Fluorescence Channels	<ul style="list-style-type: none">• Simultaneously accommodates 4 fluorescence cubes plus bright-field imaging
Contrast Methods	<ul style="list-style-type: none">• Fluorescence and transmitted light (bright-field and phase-contrast)
Objective Capacity	<ul style="list-style-type: none">• 5-position turret; front-mounted control
Objectives	<ul style="list-style-type: none">• Wide selection of high-quality, long working distance (LWD), and coverslip-corrected objectives ranging from 1.25x to 100x
Condenser	<ul style="list-style-type: none">• 60 mm LWD condenser, 4-position turret with a clear aperture and 3-phase annuli
Stage	<ul style="list-style-type: none">• Motorized X/Y scanning stage; 120 x 80 mm travel range with submicron resolution; drop-in inserts to receive vessel holders and lockdown holders to fix sample during long scans
LCD Display	<ul style="list-style-type: none">• 23" high-resolution touch-screen color monitor; 1,920 x 1,080 pixel resolution
Cameras	<ul style="list-style-type: none">• High-sensitivity 3.2 MP (2,048 x 1,536) monochrome & color CMOS sensors with 3.45 μm pixel resolution
Captured Images	<ul style="list-style-type: none">• 16-bit RAW monochrome: TIFF, PNG; 8-bit TIFF, PNG, JPG; Movies and time-lapse images: AVI, WMV
Dimensions (L x W x H)	<ul style="list-style-type: none">• 46 x 33 x 36 cm (18 x 14 x 13 in.)
Weight	<ul style="list-style-type: none">• 16 kg (35 lb)

Onstage Incubator

When combined with the onstage incubator, the A1 Cell Imaging System is ideal for long-term monitoring of cell cultures and time-lapse imaging at high resolution. The onstage incubator is an environmental chamber that allows for precise control of temperature, humidity, and three gases for time-lapse imaging of live cells under both physiological and nonphysiological conditions, making the system ideal for demanding hypoxia experiments.



Onstage Incubator Specifications

Compatible vessels	<ul style="list-style-type: none">• Multiwell plates, 35, 60, and 100 mm petri dishes, T-25 flasks, chamber slides, and more
Temperature range	<ul style="list-style-type: none">• Ambient to 40°C
CO ₂ range	<ul style="list-style-type: none">• 0 – 20%
O ₂ range	<ul style="list-style-type: none">• 0% to ambient
Humidity range	<ul style="list-style-type: none">• >80% relative humidity at 37°C
Dimensions (H x D x W)	<ul style="list-style-type: none">• 25 x 19 x 3.7 cm (environmental chamber), 37 x 16 x 20 cm (control unit)
Weight	<ul style="list-style-type: none">• 1.5 kg (environmental chamber), 10 kg (control unit)