

## TECHNICAL SPECIFICATIONS

### Mateo FL base configuration

Light source	4-line LED (UV: 385/12nm; B: 472/28nm; G: 552/45nm; R: 635/20nm), white LED (for transmitted light)
Contrast methods	Transmitted illumination (brightfield and phase contrast) and incident fluorescence illumination
Condenser	S40/0.45, working distance 50 mm
Phase turret	Automated; 5-position
Filter cube turret	Automated; 5-position
Objective nosepiece	Encoded; 6-position nosepiece
Preinstalled objectives	None
Stage	Fixed stage (L*W) 262 mm x 212 mm
Focusing	Coarse and fine focusing; travel range 7 mm, min. adjustment 2 $\mu$ m
Camera	6 megapixel color camera (integrated), 6 megapixel mono camera (integrated) CMOS, sensor size 1 / 1.8", pixel dimensions 2.4 $\mu$ m x 2.4 $\mu$ m H 3072 px, V 2048 px
Software	Embedded operating system. PC is not required.
Image output	JPEG and TIFF
Display	Color monitor with adjustable tilt 1920 pixels x 1080 pixels
Onboard storage	500 GB
USB ports	1 x USB 3.0, 3 x USB 2.0
Dimension (depth x width x height)	395 x 375 x 615 mm
Weight	22 kg (with optional components)
Transportation aid	Supporting handle on the back of the microscope

### Optional accessories

Object guide kit	Includes the object guide with two holding frames
Objectives	2.5x N PLAN, 4x HI PLAN / PH0, 5x N PLAN / PH0, 10x HI PLAN I / PH1, 10x N PLAN / PH1, 20x HI PLAN I, 20x HI PLAN I / PH1, 20x N PLAN L / PH1, 20x HC PL FL L / CORR PH1 PL FLUOTAR L, 40x HI PLAN I / PH1, 40x HI PLAN I / PH2, 40x N PLAN L / CORR PH2 N PLAN L, 40x HC PL FL L / CORR PH2 PL FLUOTAR L, 63x N PLAN
Filter cubes	DAPI 390, GFP ET, Y3 ET, Y5 ET
Wi-Fi dongle	Wi-Fi dongle to share images; 5 GHz/2.4 GHz
Thermal plate	TPX Heating Frame Glass Type F

## MATEO FL

Digital fluorescence inverted microscope for advanced cell culture experiments



### ■ Reliable, reproducible, advanced cell checks.

Boost your advanced cell culture research with the Mateo FL digital inverted microscope.

### ■ Benefits:

- > Save time and effort with multi-modal fluorescence and transmitted light imaging in a single platform.
- > Make your experiments easier with automated analysis tools.
- > Reduce contamination risks by at least 50% and double your workflow efficiency by capturing both monochrome and color images without needing to physically swap devices.
- > Experience secure data tracking and seamless data transfer.

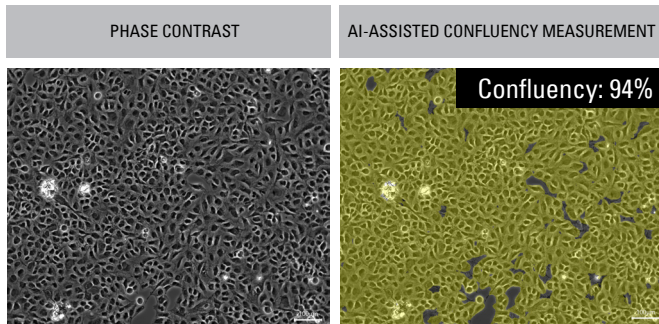
# POWER UP YOUR CELL CULTURE EXPERIMENTS

Ensure precision and reproducibility for advanced cell culture experiments with automated analysis and multi-channel fluorescence imaging.

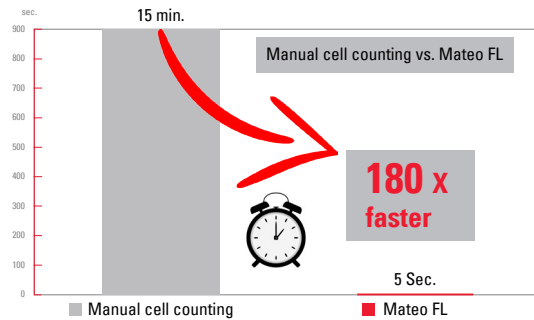
## ■ Make your experiments easier with AI-powered workflows

Boost reliability and consistency in your cell culture experiments with AI-powered algorithms and analysis.

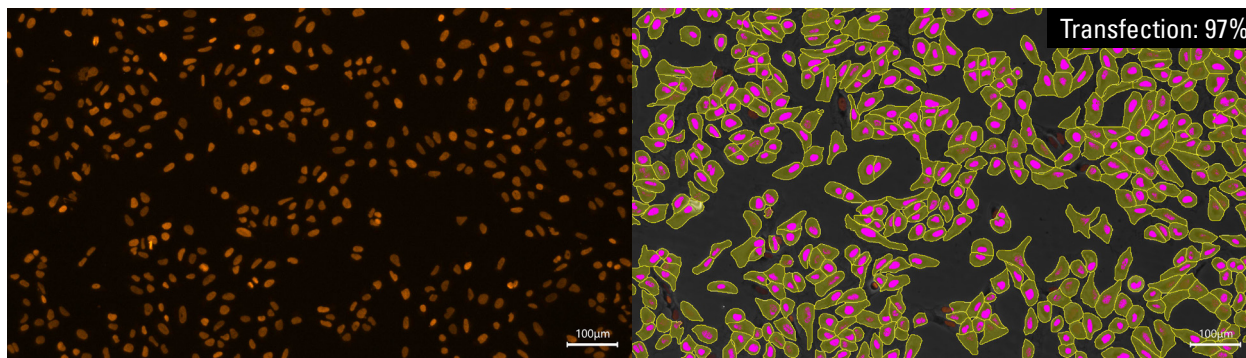
> Eliminate guesswork with AI-assisted confluency measurements and increase confidence in your downstream experiments.



> Get an accurate, automated cell count in 5 seconds, saving you an average of 15 minutes of manual cell counting.

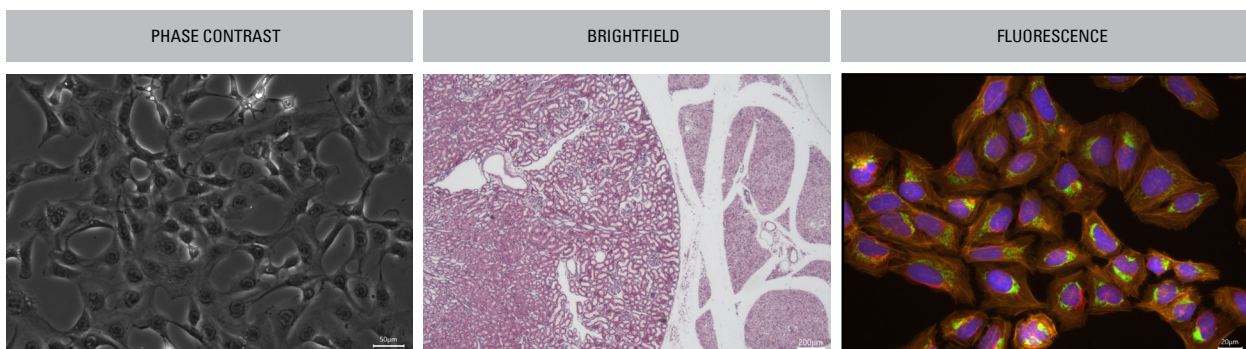


> Optimize your transfection process with smart insights.



## ■ Save time and effort with multi-modal imaging

Mateo FL offers multi-modality fluorescence and transmitted light imaging in a single platform. Save time and enjoy more flexibility in experimental design with channels that are optimized for specific fluorophores.



## ■ See more with less fuss

The automated phase contrast saves you time, offering you label-free imaging without fluorescent markers. It also enhances the visibility of unstained, transparent, translucent or low-contrast specimens. Additionally, the built-in dual camera system eliminates the need for physical camera changes and alignment, streamlining processes and improving efficiency.

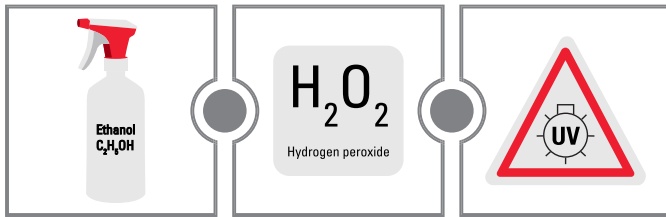
# KEEP A LID ON CONTAMINATION

Maintain a sterile workspace with the compact design of Mateo FL, for reliable, reproducible research.

## ■ Prevent sample contamination for consistent results

Elevate your cell culture research outcomes by avoiding the inconvenience of contamination-related lab downtime.

- > Mateo FL can be used in biosafety level BSL 1 and BSL 2 laboratories as it is compatible with UV, ethanol and hydrogen peroxide decontamination methods.



- > Protect your sample from contamination and save valuable experiment time thanks to streamlined workflows and an integrated dual camera, eliminating the need for sample transfers mid-experiment.

## ■ Optimize your space and workflow with an integrated design

The compact and integrated design of Mateo FL helps reduce contamination risks by at least 50%. Workflow efficiency is doubled by capturing both monochrome and color images without the need to physically swap devices mid-experiment.

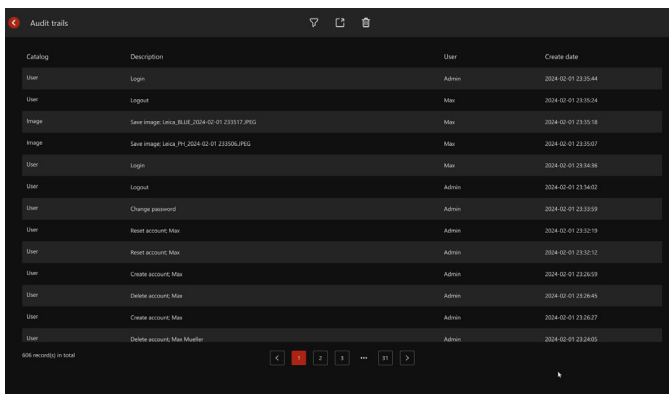


# DATA MANAGEMENT YOU CAN COUNT ON

Step up reliability and efficiency through enhanced data tracking with audit trails and sharing on the go.

## ■ Experience secure data tracking and seamless data transfer

Mateo FL has built-in audit trails and user management functionalities that support FDA 21 CFR Part 11 compliance, making data management easier and more secure.



Catalog	Description	User	Create date
User	Login	Admin	2024-02-01 22:26:44
User	Logout	Max	2024-02-01 22:50:04
Image	Save image: Lincx_BLUE_2024-02-01 22:51:17.JPG	Max	2024-02-01 22:51:18
Image	Save image: Lincx_PI_2024-02-01 22:55:05.JPG	Max	2024-02-01 22:55:07
User	Login	Max	2024-02-01 22:58:36
User	Logout	Admin	2024-02-01 23:16:02
User	Change password	Admin	2024-02-01 23:23:59
User	Reset account: Max	Admin	2024-02-01 23:32:19
User	Reset account: Max	Admin	2024-02-01 23:32:32
User	Create account: Max	Admin	2024-02-01 23:26:59
User	Delete account: Max	Admin	2024-02-01 23:28:45
User	Create account: Max	Admin	2024-02-01 23:26:27
User	Delete account: Max Mueller	Admin	2024-02-01 23:26:05

- > Effortlessly track and manage your samples with the bar code reader function.
- > Collaborate and share data more easily by seamlessly transferring your microscope data to any mobile device with QR codes.

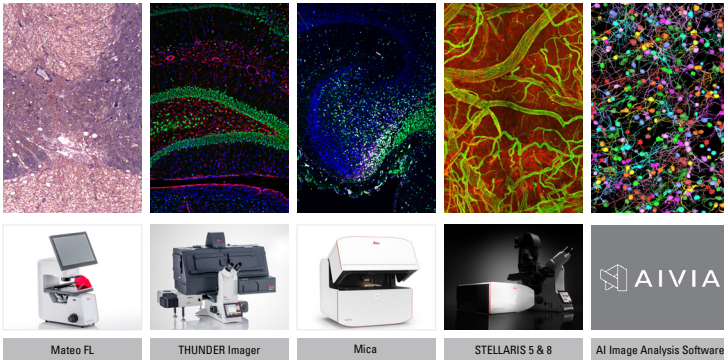
- > Store large volumes of data without the need to frequently transfer or delete files. With 500 GB of built-in storage, you could save up to 3 million images on the system, eliminating the need to invest in a high-performance tablet or cloud storage.



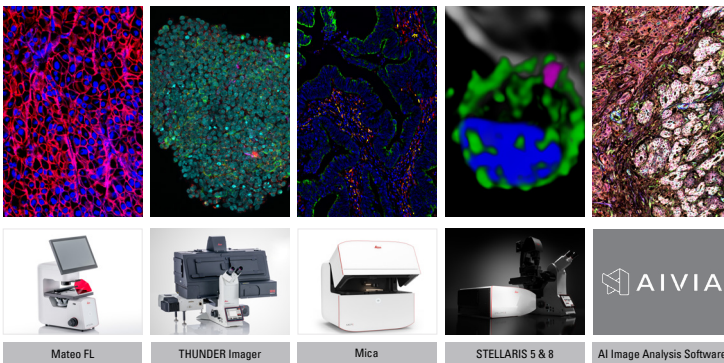
## HOW DOES MATEO FL FIT INTO YOUR WORKFLOWS?

Mateo FL seamlessly integrates into a comprehensive imaging workflow, serving as an initial observation step before transitioning to advanced imaging systems like THUNDER, Mica, and STELLARIS.

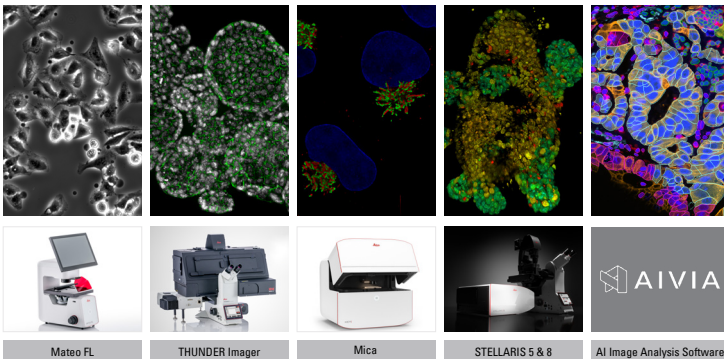
### NEUROSCIENCE



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