

THE MOST CUSTOMIZABLE PLATFORM FOR AUTOMATED FLUORESCENCE MICROSCOPY.

Versatile. Affordable. Intuitive.



YOUR FLUORESCENCE MICROSCOPE!

Welcome to Askion, where we understand the importance of tailored solutions in today's competitive business environment.

Since 2004, ASKION has been a trusted partner for companies looking to develop and manufacture medical and bioanalytical devices.

Our expertise lies in designing and manufacturing of customized fluorescence microscopes that showcase the full potential of your technology, whether you're developing diagnostic tools, studying disease mechanisms, or creating image analysis software solutions.

We're proud to offer a white-label-ready platform for fluorescence microscopy that can be tailored to your application and designed to complement the portfolio of your assays, kits, or ancillary products. White-labeling also simplifies your operations by allowing you to focus on your core competencies while leaving the device production and distribution to a trusted partner.

Choose between the compact bench-top analyzer, FluoS®, or the more advanced model, FluoM®, which offers higher-throughput analysis. With only a smalll amount of modifications, both FluoS® and FluoM® can be easily adapted to your specific requirements.

You have the opportunity to select objectives with various magnifications, fluorescence channels with LED excitation, and support for different sample formats, from standard glass slides and microwell plate to seamless integration of your own custom cartridges.



Our platform provides flexibility in software as well. You can use Askion's integrated software for image acquisition or configure the platform to work with your own specific software for automatic routine analyses.

Finally, take a full ownership of your customized microscope by incorporating of your specific housing, logo, colors, and other branding elements to leverage your brand reputation.

Beyond the manufacturing, we support you in the regulatory process for in vitro diagnostic registration of your microscope in combination with your assays.

with Askion's White
Label Fluorescence
Microscopes!

BE ONE STEP AHEAD OF YOUR COMPETITION.

BENEFITS



Technical configuration can be adapted for a wide range of applications, providing flexibility and supplementing the portfolio of your assays.

AUTOMATED

Instantly removes the subjective interpretation of data by standardizing the analysis process, providing more objective and reliable results for routine applications.



INTUITIVE

Easy to use operation allowing for faster and more accurate analyses rather than learning complicated equipment.





INTEGRATABLE

No more manual sample processing. Whether as a key component of automated pipetting robots or an integrated part of external analytical equipment, our versatile microscopes seamlessly empower your laboratory automation workflow.

ATTRACTIVE PRICE PERFORMANCE RATIO

Highly affordable while still delivering excellent performance, with features and capabilities that are comparable to more expensive models, making it a great investment with a good return.

PRECISION IN ACOMPACT DESIGN

FluoS®



Intuitive platform for your routine fluorescence microscopy.

FluoS® is a remarkable entry-level microscope that provides exceptional features in a compact and affordable package. As a stand-alone epifluorescence microscope, it boasts a user-friendly touchscreen interface that simplifies operation and navigation, even for inexperienced users.

The FluoS® platform offers automated sample processing, which significantly simplifyies the operation. The front-loaded sample holder which incorporates two standard size glass slides, can be further effortlessly adaptable to diverse sample or assay formats.

FluoS® offers customization options with up to three selectable fluorescence channels. Depending on your specific requirements, a microscope objective with a magnification ranging from 4x to 60x will be installed.

Despite being fully functional and automated, FluoS° is incredibly small and transportable, making it an ideal point-of-care device or for use in limited laboratory spaces.

FluoS® is perfect entry-level to automated fluorescence microscopy or for routine analysis, offering a flexible and user-friendly platform that complements any portfolio of assays.



Specifications

Working principle	epitluorescence microscope
Camera	2,3 MP; CMOS
Objective	1 fixed installed, selectable magnification (4x, 10x, 20x, 40x or 60x)
Sample formats	2 standard slides 26 mm x 76 mm or customizing available
Positioning	automatic or manual
Autofocus	automatic contrast-based autofocus routine
Fluorescence channels	up to 3 fluorescence channels with LED-excitation, e.g.: DAPI (Ex. 385 nm) FITC (Ex. 470 nm) Cy5 (Ex. 633 nm) other customized configurations on request
User interface	integrated 10" touch display
Software	automatic and individual device operation sample positioning and focusing image aquisition in all fluorescence channels customer specific protocol creation application specific functionalities
Power supply	external power supply 12V / 100W
Dimensions	28 cm x 46 cm x 32 cm (w/d/h)
Total weight	ca. 15 kg



UNINATCHED FLEXIBILITY TO STREAMLINE YOUR WORKFLOW

Advanced stage platform of automated fluorescence microscopy.

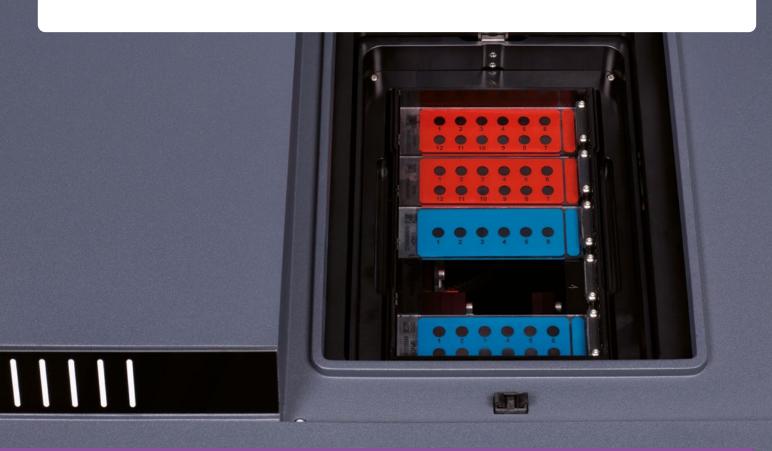
FluoM® is an advanced inverse microscopic system that's highly flexible and offers outstanding performance. It features an integrated PC, external monitor, keyboard, and as a top-loaded insert that can hold up to five slides, one microwell plate, or customized samples.

With up to four fluorescence channels and three automatic changeable objectives, FluoM® provides a high level of control over imaging and customization of microscopy approach to suit specific needs. Designed to integrate seamlessly into lab automation systems, FluoM® is an adaptable platform that maximizes efficiency and streamlines workflows.



Specifications

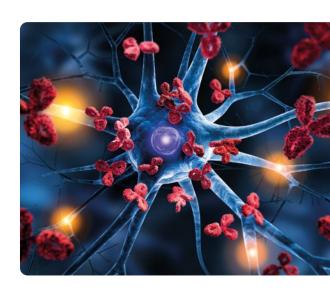
Working principle	inverse fluorescence microscope
Camera	2,3 MP; CMOS
Objective	automatic 3 objective nose piece, selectable magnification (4x, 10x, 20x, 40x, 60x)
Sample formats	removable sample insert for 5 standard slides (26 mm x 76 mm) or microwell plate
Positioning	automatic or manual
Autofocus	automatic contrast-based autofocus routine
Fluorescence channels	up to 4 fluorescence channels with LED-excitation, e.g.: DAPI (Ex. 385 nm) FITC (Ex. 470 nm) Cy5 (Ex. 633 nm) other customized configurations on request
User interface	external monitor and keyboard
Software	automatic and individual device operation sample positioning and focusing image aquisition in all fluorescence channels customer specific protocol creation application specific functionalities
Power supply	external power supply 24V / 200W
Dimensions	39 cm x 49 cm x 32 cm (w/d/h)
Total weight	ca. 18 kg



CLINICAL APPLICATIONS OF OUR FLUORESCENCE MICROSCOPY PLATFORM

Autoimmune diagnostics

Indirect immunofluorescence (IIF) is highly specific, but evaluating fluorescence patterns manually is time-consuming. Our automated microscopy platform acquires images quickly and evaluates results by using Al-based software. Ascertain the end titer of antibodies, identify multiple fluorescent patterns, or search for biomarkers, such as ANA, ANCA, and dsDNA antibodies. This renders it an exceptional tool for rapid and routine diagnostic of various autoimmune disease or as a POC device in veterinary praxis.

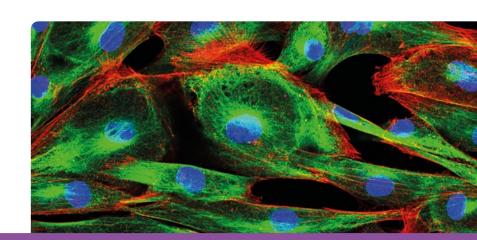


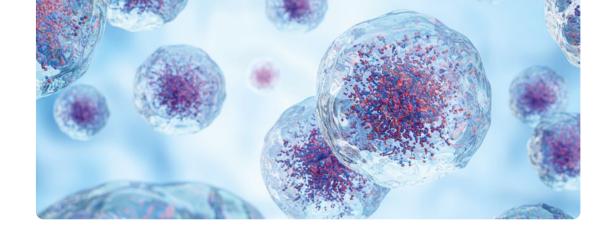
Infectious-diseases diagnostics

Direct immunofluorescence (DIF) is a valuable tool for diagnosing infectious diseases. DIF involves staining a sample with fluorescently labeled antibodies specific to the infectious agent of interest, allowing for rapid and sensitive detection. DIF can be used to diagnose a wide range of infections, including viral, bacterial, fungal, and parasitic diseases.

Furthermore, our platforms also allow for the detection of contamination in food, water, and environmental samples or pharmacological products to identify potential sources of infection and take appropriate measurements.







Regenerative medicine and Oncology

FluoS® and FluoM® are cutting-edge solutions for stem cells research and cancer diagnostic needs.

Our technology allows for the enumeration of circulating tumor cells, cell-free tumor DNA and RNA or tumorderived exosomes, providing a non-invasive approach to cancer diagnosis and monitoring. Labeling specific cancer biomarkers with fluorescent antibodies significantly improves personalized treatment options.

Additionally, both platforms allow for precise and accurate quality control of stem cells, thereby revolutionizing the way we approach disease treatment and regenerative medicine.



Molecular genetics and Cytology

Genetic testing has become a crucial tool in modern medicine to diagnose inherent disorders, guide personalized treatments, and even predict individual risk of developing certain conditions.

Automated microscopy enables high-throughput analysis of specific chromosomal abnormalities in cells using fluorescence in situ hybridization (FISH). With high-quality optics and advanced imaging capabilities allow for combined cell morphology examination to FISH analysis can be combined with morphology examination to increases the sensitivity and specificity of an assay, leading to better patient outcomes.

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Cell counting and cell analysis

From the manual operation of single samples to integration into a fully automated process – FluoS® and FluoM® platforms are ideal for cell counting and cell analysis, especially for time-consuming microscopy routines. We offer fully automated processing of samples, allowing researchers and laboratory technicians to analyze large sample volumes quickly and accurately. Our platforms are adaptable and fully compatible with a custom of software packages, allowing users to easily integrate their own software and automate their microscopy routines.



TAILORED FOR SUCCESS:

COMPLEMENT YOUR TECHNOLOGY WITH OUR CUSTOMISED FLUORESCENCE MICROSCOPY PLATFORM.



Complement the portfolio of your assays with your own fluorescence microscope.

The most flexible configuration allows you to adapt the microscope to only your specific analysis, which can be a real game-changer in research and development of new diagnostic tools.

Responding quickly to changing customer demands will enhance your competitive advantage and provide a new revenue stream.

Streamline your workflow with integration into laboratory automation.

Our microscopes are designed with unmatched flexibility, enabling them to be seamlessly integrated into external laboratory automats.

This allows you to increase your performance and throughput while reducing errors and minimizing the time and effort required to collect and analyze data.



Incorporate your own software tools or specific hardware functionalities.

You have the unique possibility to implement your technologies, image analysis software, or hardware components, all within a single integrated platform. You will be able to create an exceptional device to accomplish all your research ideas and scientific objectives.

Commercialize your idea or technology and engage with a strong industrial partner.

We provide you with expertise in developing of new fluorescence microscopy solutions to accelerate your discoveries and stream your intellectual property.

Partner with us today to unlock the full potential of your research. We bring your technology to the market.

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MICROSCOPE TO SUIT YOUR SPECIFIC REQUIREMENTS

The FluoS® or FluoM® Microscope platform can be easily tailored to meet your specific requirements through simple modifications, for example:





SAMPLE FORMAT

Whether your assay is designed for standard glass slides or various formats of multiwell plates (FluoM® only), our platform can accommodate them. We'll assess the possibility of integrating your special sample formats or customized cartridges into our system.

FLUORESCENCE CHANNELS WITH LED EXCITATION



Choose up to three fluorescence channels from our configurable optical filter sets, allowing you to select the optimal excitation and detection wavelengths for your specific application. The advanced FluoM® model also includes a motorized mechanical filter changer for added convenience.



OBJECTIVES

Select microscope objectives from the renowned Olympus series, providing magnifications ranging from 4x to 60x. This allows you to capture high-resolution images with precision and clarity.

SOFTWARE

Our essential software enables you to capture perfect fluorescence images. The basic configuration includes automated software modules for optimal focusing using a contrast-based autofocus routine and automatic optimization of exposure parameters for optimal raw data. In addition, we offer configurable routines for automated measurement sequences (e.g., for capturing images at different predefined positions on your samples) and interfaces for integrating your specific image analysis software.





HOUSING

Customize your device with your own branding elements, colors, or logo to create a personalized and cohesive identity for your brand.

Additional technical modifications and customizations can be provided upon request. We are committed to meeting your specific needs and ensuring the optimal performance of your fluorescence microscope.



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