

LIFE SCIENCE

IXplore™ IX85 SpinXL

Spinning Disk Confocal Microscope

Powered by CrestOptics

Widen Your View into Cellular Dynamics



EVIDENT

See More, Discover Faster



See more and discover faster with the IXplore™ IX85 SpinXL spinning disk confocal microscope. With an unparalleled 26.5 mm field of view (FOV), you can capture cellular dynamics faster and screen large areas quickly. Precise, gentle live-cell imaging supports sample viability and image consistency.

- Streamlines tasks throughout the lab with intelligent automation and easy workflows.
- Supports many imaging applications and multiple users by balancing speed, precision, and flexibility.
- Evolves with your research via a wide wavelength range, tailored disk options, and expandable imaging modalities.

Mouse kidney. DAPI (gray), WGA (red), phalloidin (cyan).

Expand Your View, Accelerate Your Insights

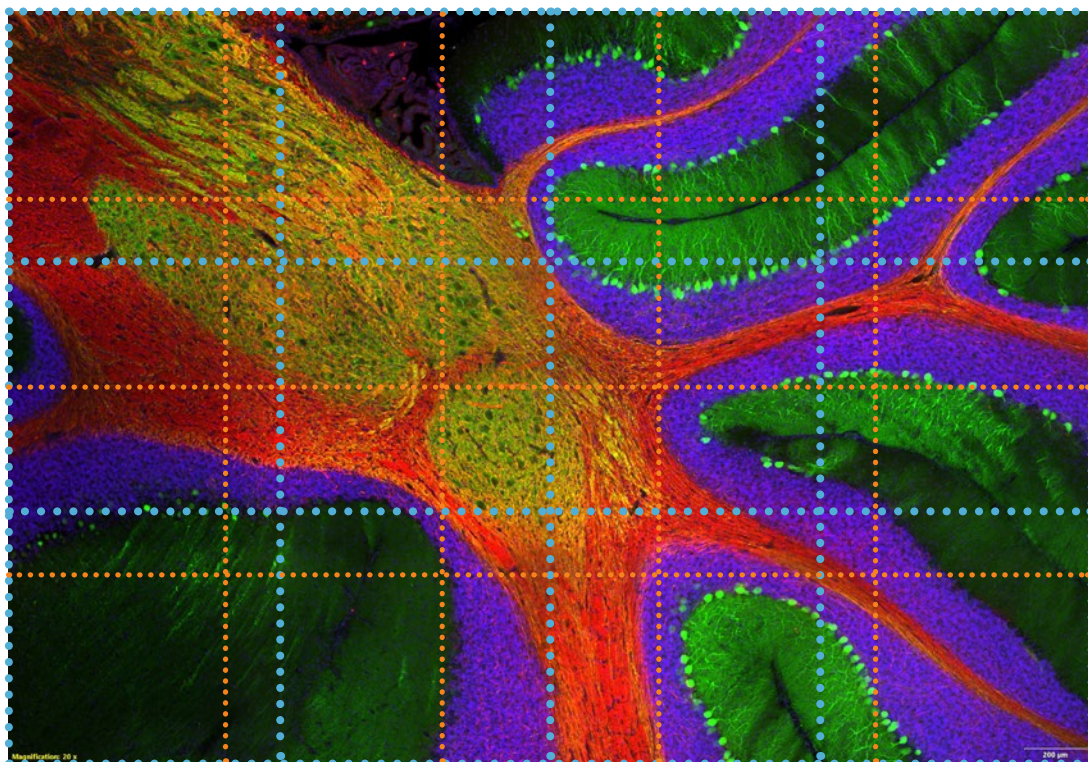
Optimized for fast, gentle live-cell imaging, the IXplore™ IX85 SpinXL can rapidly acquire dynamic cellular events at high resolution. Combining an industry-leading 26.5 mm FOV with high-speed imaging capabilities, the system reduces your imaging time for large sample sets so you can get all the data you need, faster.

100 µm

3D epithelial breast cancer spheroids. DAPI (blue), pericentrin (yellow).

Capture More in Every Frame

Whether you're working with large, thick samples or multi-well plates, the IXplore IX85 SpinXL speeds up the process and enables you to quickly acquire massive quantities of data. Capture large tissues using 45% fewer images than FN22.



··· FN26.5

··· FN22

Rat cerebellum. Hoechst (blue), Calbindin (green), MAP2 (orange), MBP (red).

A Wider Window into Cellular Dynamics

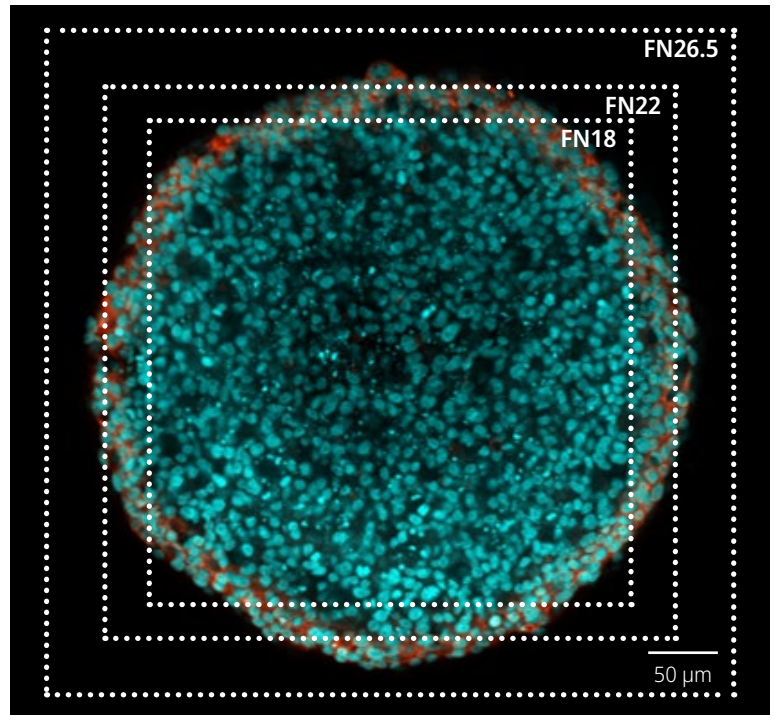
Quickly capture more cellular dynamics, such as calcium signaling, mitochondrial activity, or vesicle trafficking, in a single frame.

- Unparalleled 26.5 mm FOV.
- Image at speeds up to 498 fps at full frame.
- Simultaneous dual-channel imaging.

See Deeper with Gentler NIR Imaging

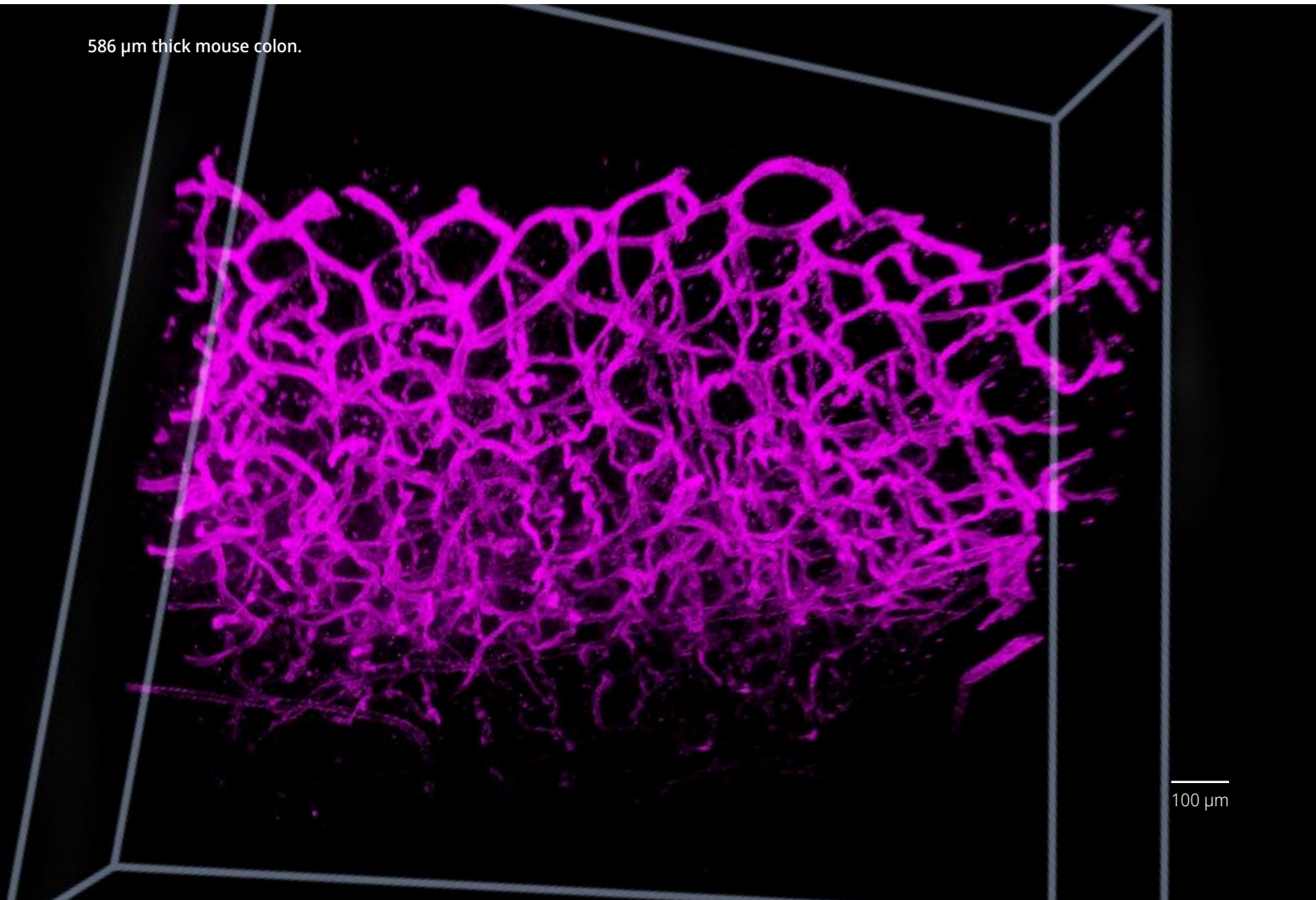
Near-infrared (NIR) imaging brings several benefits to your imaging.

- **Deeper tissue penetration** due to reduced light scattering.
- **Clearer signal detection** with minimized autofluorescence and spectral crosstalk.
- **Gentler imaging** for your live tissues with reduced phototoxicity.
- **Expanded multiplexing** made possible by more channels captured on a single sample.



600 µm diameter HT-29 spheroid imaged with a 25X objective.
DAPI (cyan), phalloidin (red).

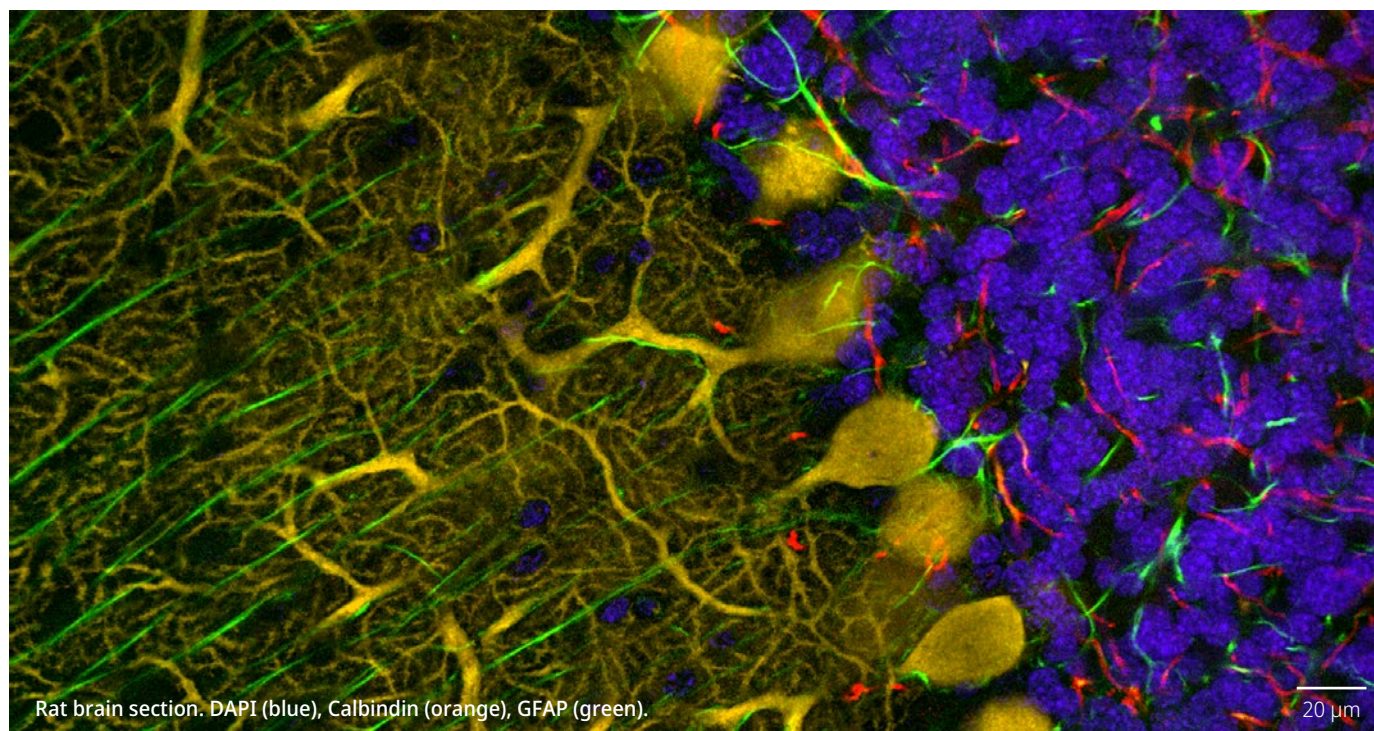
586 µm thick mouse colon.



Experience Precision and Clarity

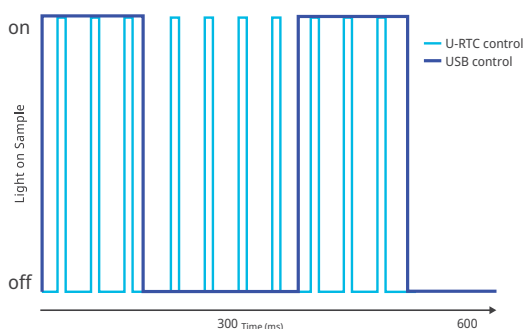
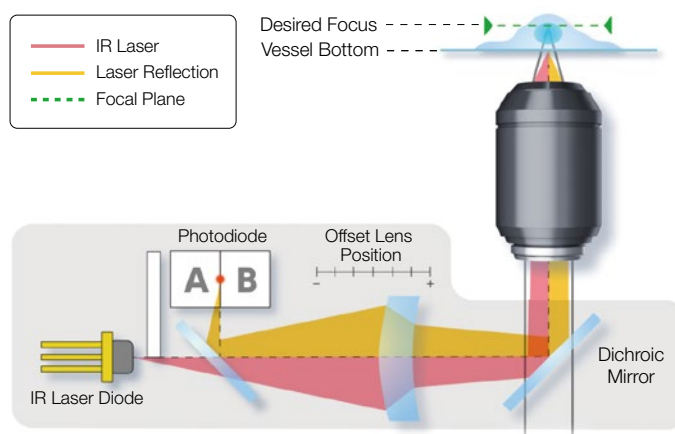
An innovative combination of optical advances enables you to see fine details with precision and clarity so you can quickly obtain impactful, publication-ready images.

- **Even illumination:** Collect large, uniform images using X-Light microlens technology and Evident optics that provide consistent lighting across the entire FOV.
- **Clear details from center to edge:** Count on edge-to-edge precision with proprietary distortion correction technology and expanded flatness.



Your Sample in Focus

Capture high-precision, multipoint time-lapse images that are aligned and in focus with our TruFocus™ Z-drift compensator. With stable focus for long-term imaging and plate screening, you can be confident in the quality of your results.



Synchronized High-Speed Imaging

The real-time controller works as the system's conductor, ensuring that every system component is working together with microsecond accuracy. It delivers coordinated imaging even at the highest speeds, reducing the risk of sample damage with shorter exposures.

Adaptable by Design. Ready for Every Researcher.

Expand your application possibilities with the IXplore™ IX85 SpinXL. This powerful platform supports both widefield and adaptable confocal imaging so you can see and discover more with flexible configurations. Leverage the platform to upgrade and expand your system with new technologies as your lab's research needs evolve.

More Colors, More Information

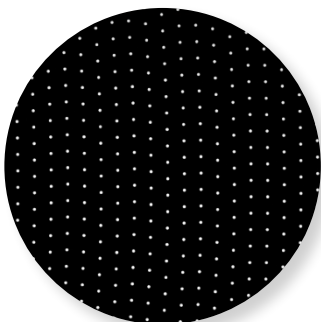
Capture more colors and more information in one image with the system's advanced multiplexing features. Access an expansive range of wavelengths from 405 to 730 nm and the ability to image in up to seven channels, including in the NIR. Powered by the 89 North laser diode illuminator (LDI).

Neurons. DAPI (blue), ATP5 (yellow), vimentin (red), MAP2 (green).

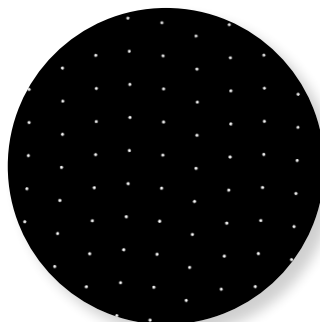


Disk Boxes Tailored to Your Applications

Whether working with thick, dense, or other unique sample types, the IXplore IX85 SpinXL can meet your needs. Disk boxes are sealed to prevent dust or other contaminants from impacting image quality, and disk patterns can be switched as needed.



50 μ m: 250 disk
for standard applications



50 μ m: 400 disk
for thick samples

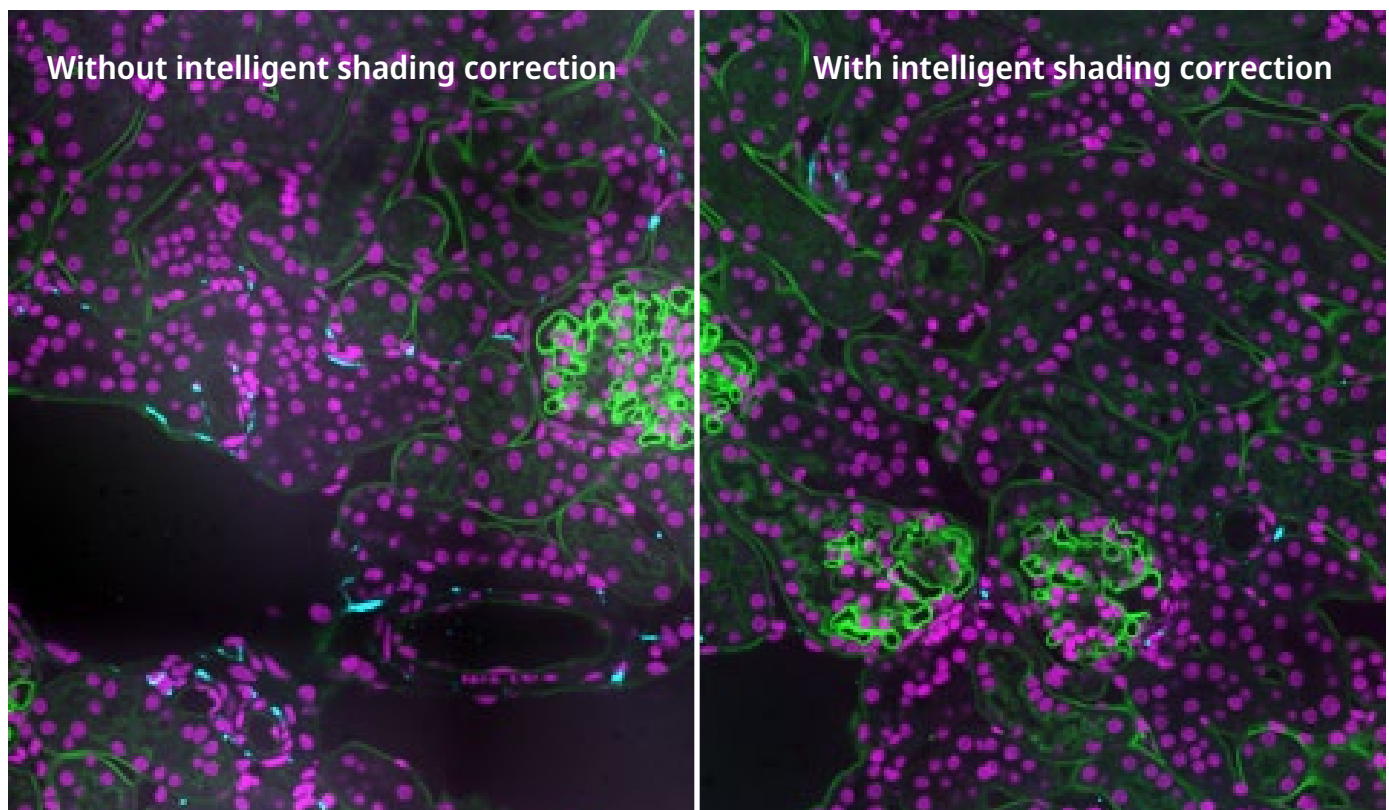


Spiral disk
for higher throughput imaging

Workflows That Empower Efficiency

Get the most from your biological samples with intuitive cellSens™ software. A suite of powerful tools streamlines acquisition, processing, and analysis, enabling seamless customization to suit your unique application needs.

- Quickly locate samples and acquire high-magnification images with an AI-based macro-to-micro workflow.
- Intuitively set up complex multi-well experiments using the well navigator.
- Easily define your acquisition and image processing steps, including 5D experiment acquisition, in the Graphical Experimental Manager (GEM).
- Automatically identify and analyze key biological features in your images using our TruAI™ tools.
- Automatically create seamless, high-quality stitched images with intelligent shading correction.



Mouse kidney section. Green: blood vessel in AF 488. Magenta: nuclei in SYTOX Orange. Cyan: nervous system in AF 647. Sample courtesy of EnCor Biotechnology Inc.

Automatic Enhancement

Our correction collar automatically fine-tunes your objective to reduce spherical aberrations caused by variations in cover glass thickness. The collar is compatible with a wide range of high-end objectives, enabling users to easily get the most out of the system.



Optimized Objectives for All Applications

Evident's expansive range of objectives can meet any research need, pushing your spinning disk system even further.



Mouse kidney, 60X. Phalloidin (cyan), WGA (magenta).

Consistent Quality

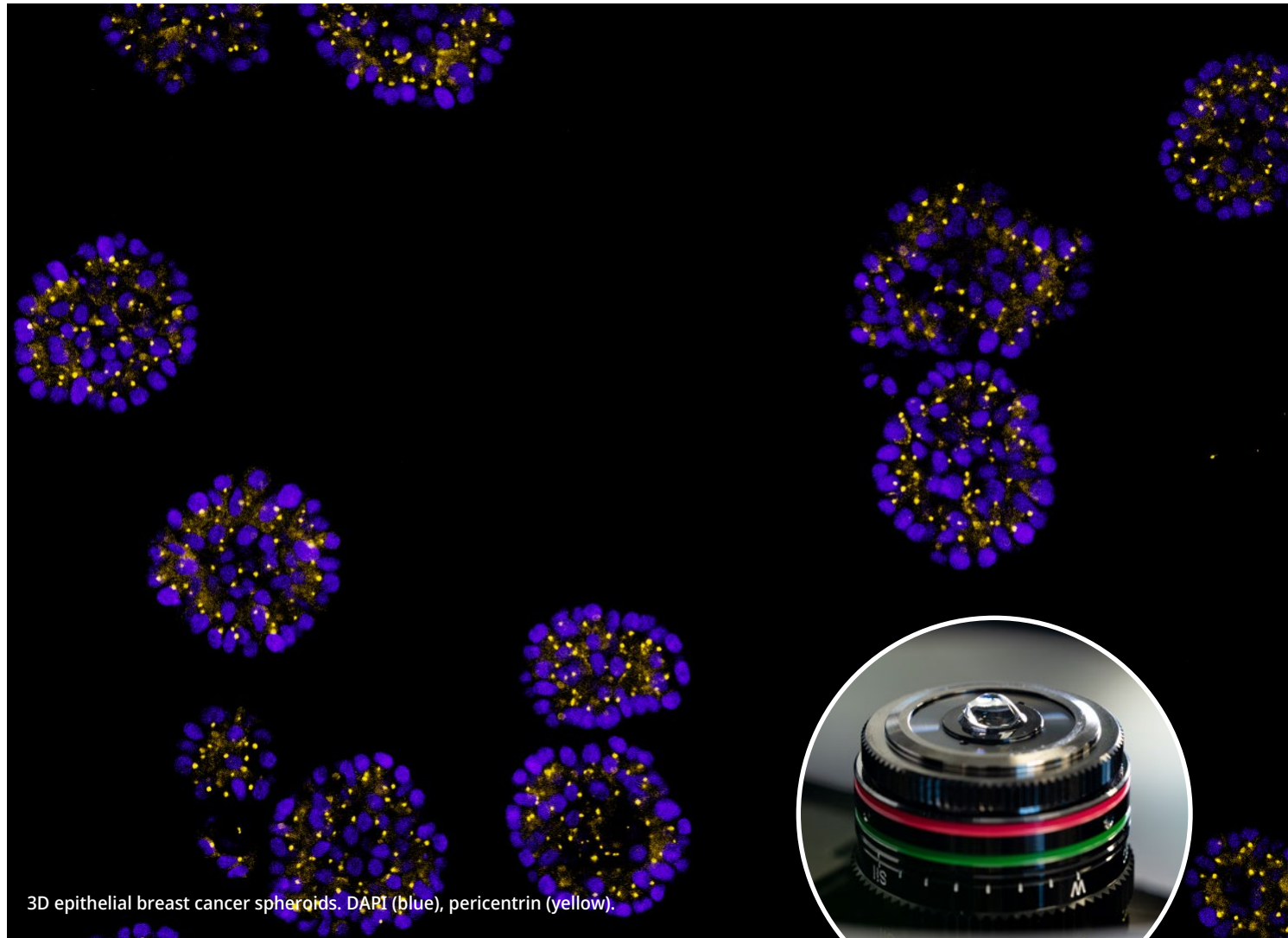
X Line series objectives redefine optical performance across applications. Taking full advantage of the IXplore™ IX85 SpinXL's 26.5 mm FOV, X Line objectives deliver exceptional correction of spherical and chromatic aberrations throughout a wide field of view. With high numerical apertures (NA) and outstanding transmission, they provide sharp, consistent images.

Sharper Images

A Line™ series objectives deliver powerful imaging performance for specific applications. Combine a wide FOV with high-magnification A Line objectives to capture sharp images of large samples, such as zebrafish, organoids, and spheroids, even without stitching.

World's First Silicone Gel Pad Objective

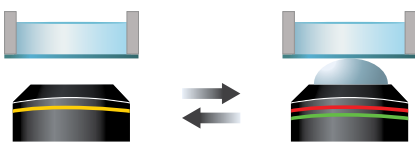
Get volumetric data of organoids or thick samples without impacting the biological functions of your samples. With a 2 mm working distance and 0.85 numerical aperture, the world's first silicone gel pad objective offers more accurate 3D volumetric reconstruction while enabling you to focus deeper into the sample.



3D epithelial breast cancer spheroids. DAPI (blue), pericentrin (yellow).

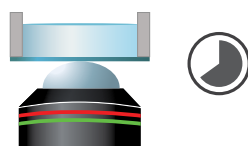
Simplified Immersion Imaging

Our LUPLAPO25XS silicone gel pad objective combines all the quality and advantages of our silicone immersion objectives with the convenience and useability of a dry objective.



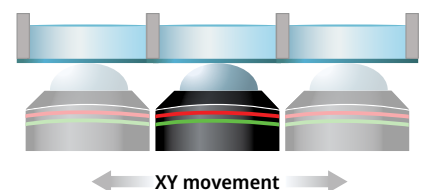
Easy Objective Switching

Seamlessly switch between dry objectives and your silicone gel pad objective. No need to clean or reapply the immersion medium.



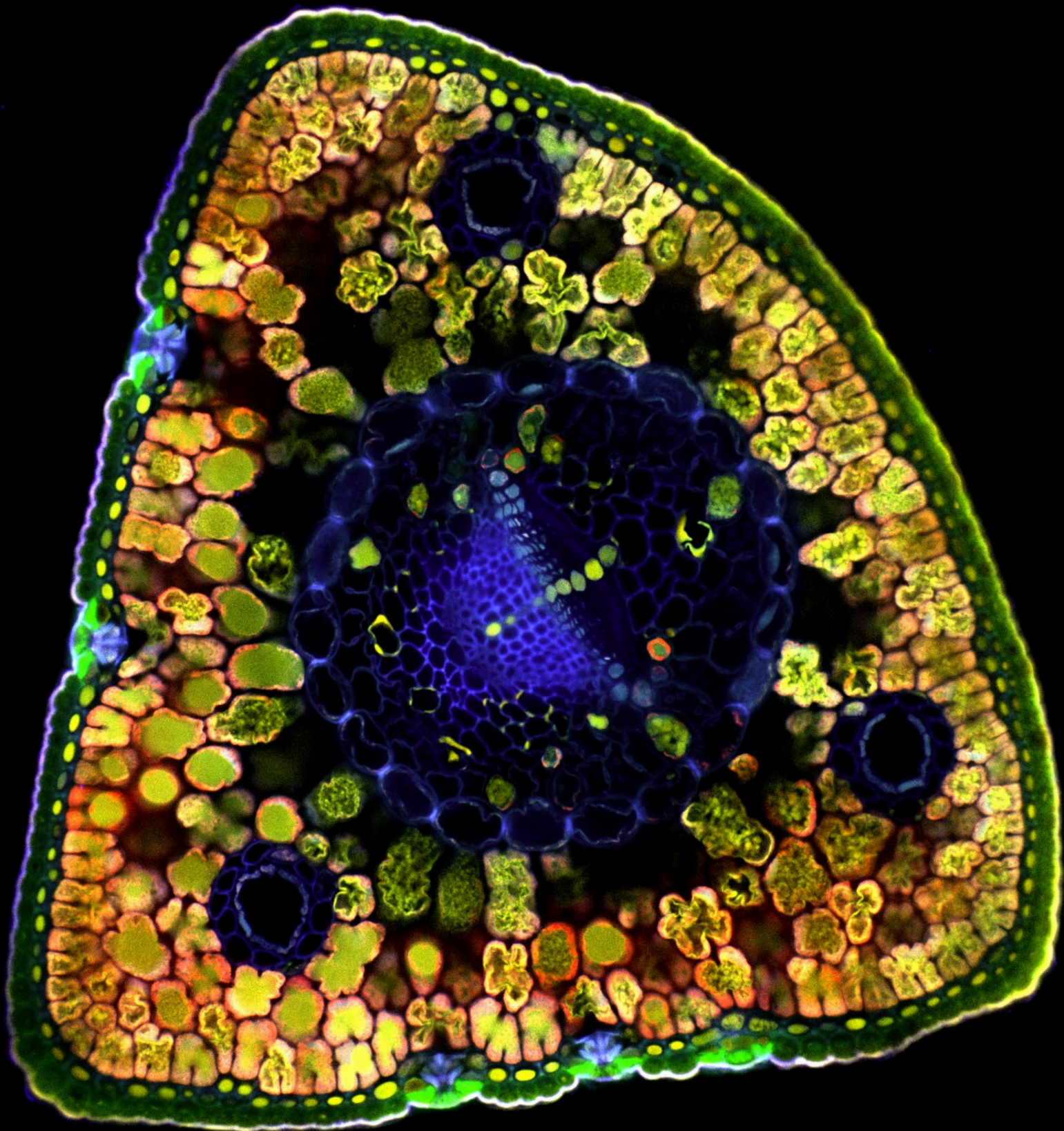
More Stable Time-Lapse Imaging

Our silicone gel pad maintains stable structure and moisture content for reliable time-lapse imaging.



Simplified Well Plate Imaging

The gel pad moves with your objective. No need to wipe or replace oil as you navigate your sample.

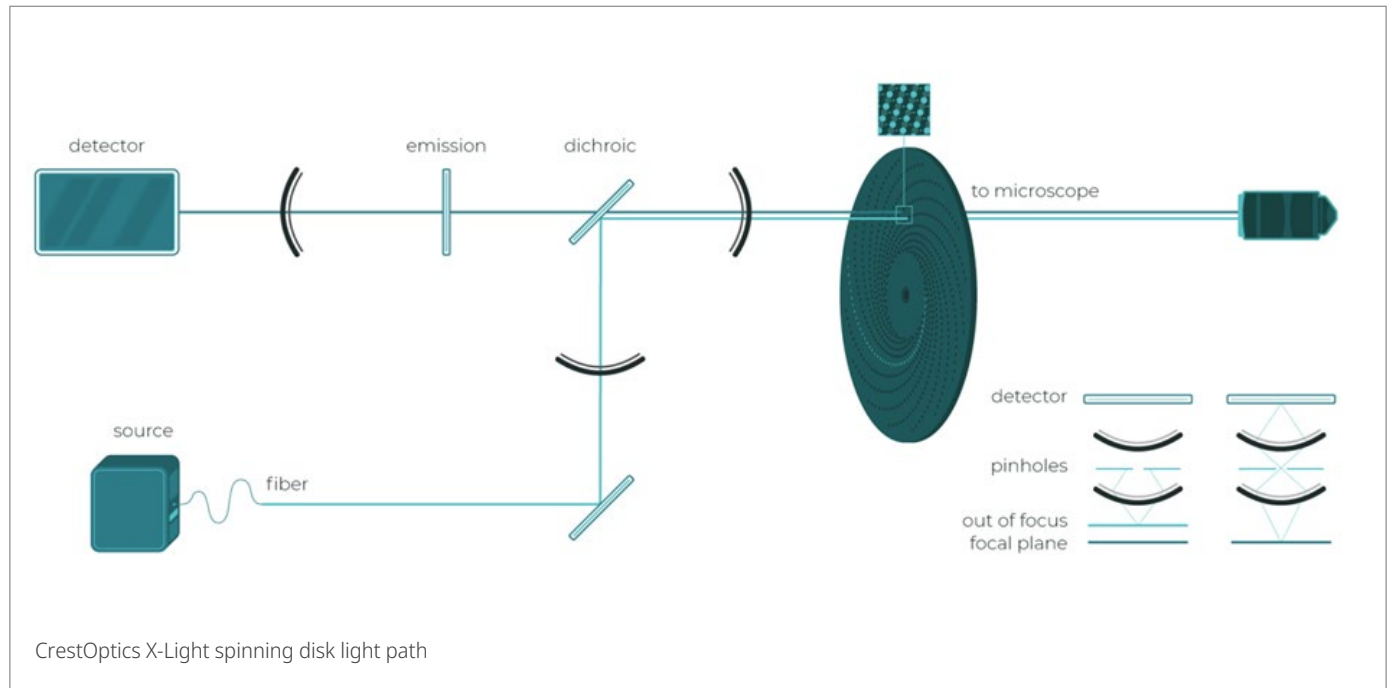


Pine needle autofluorescence.

100 μ m

Optimized Performance, Trusted Results

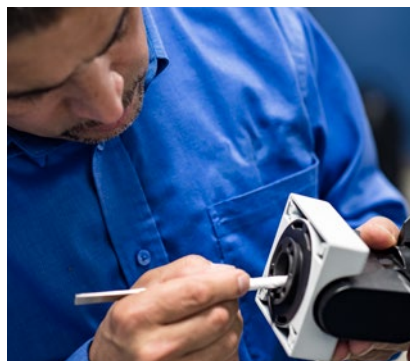
Built on the stable IXplore™ IX85 platform and powered by CrestOptics X-Light spinning disk technology, the SpinXL is optimized for high-performance imaging.



Service and Support That Empowers

All IXplore IX85 microscopes are backed by the same exceptional service and support that you've come to know and expect for the last 100 years.

Evident offers various support plans to keep your microscope operating at peak performance with predictable costs, as well as remote support options for timely assistance without waiting for a visit from a specialist. Maximize uptime and experience peace of mind with our proven service quality.



IXplore™ IX85 SpinXL Specifications

Microscope frame	IXplore IX85: IX85P1ZF, IX85P2ZF
Field of view (FOV)	Up to 26.5 mm diagonal
Disk speed	Up to 15,000 rpm
Disk patterns	50 µm pinhole / 250 µm spacing
	50 µm pinhole / 400 µm spacing
	50 µm slit
	Custom disk patterns available
Resolution	Lateral ~230 nm (1.4 NA)
	Axial ~600 nm (1.4 NA)
Camera ports	2
Tested imaging speed	Up to 498 fps for a full 26.5 FOV*
Widefield imaging	Motorized bypass mode
Scanner spectral range	Excitation: 400–750 nm; emission: 400–850 nm
Filter wheels and slider	3-position dichroic filter wheel
	8-position emission filter wheel
	4-position cleanup filter wheel
	3-position slider for dual camera
Illumination	Motorized iris to minimize sample exposure
	Microlens array for uniform illumination
Light source	89 North laser diode illuminator (LDI); up to 7 channels
Available laser wavelengths	405 nm, 445 nm, 470 nm, 488 nm, 520 nm, 530 nm, 555 nm, 577 nm, 640 nm, 730 nm**
Laser and scanner control	USB, TTL
Software	cellSens Dimensions
Installation conditions	Temperature: 23 ± 5 °C (73.4 ± 9 °F), humidity: up to 70% RH
Scanner weight	26 kg (57 lb)
Scanner dimensions (W × L × H)	357 × 606 × 225 mm (14 × 23.9 × 8.9 in.)
Scanner connector to IX85	Proprietary mount

*Captured using a Teledyne Kinetix camera with cellSens™ software.

**Not all wavelength combinations are available as standard.

Cover image: organoid. Phalloidin (cyan), E-cadherin (magenta).



- **EVIDENT CORPORATION is ISO14001 certified.**
For details on certification registration, visit evidentscientific.com/legal/iso.
- **EVIDENT CORPORATION is ISO9001 certified.**

- Illumination devices for microscope have suggested lifetimes. Periodic inspections are required. Visit our website for details.
- This product is designed for use in industrial environments for the EMC performance. Using it in a residential environment may affect other equipment in the environment.
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EVIDENT CORPORATION
Shinjuku Monolith, 2-3-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-0910, Japan