

X-Light V2

Spinning disk confocal



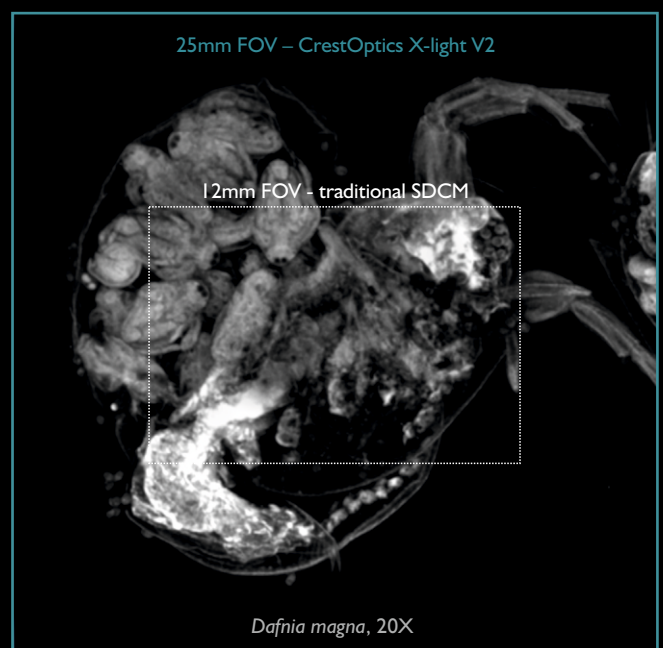
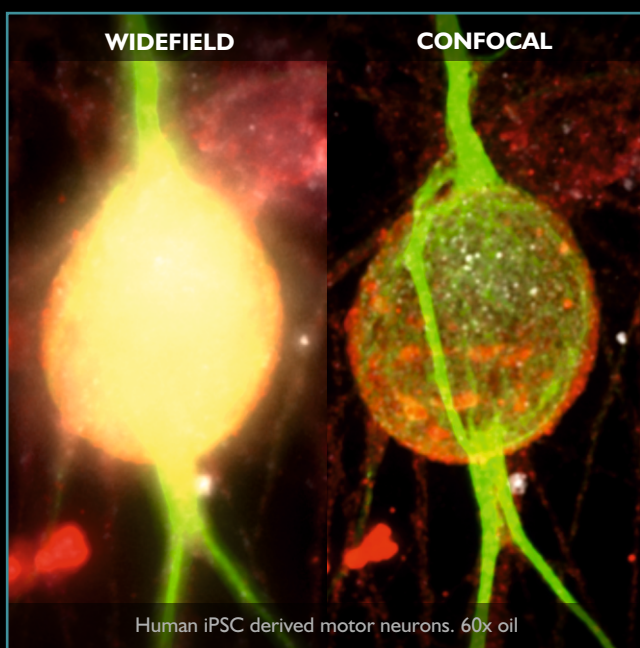
**UNIVERSAL PLUG-IN SPINNING DISK
FOR FAST AND GENTLE IMAGING**

Accelerate the research process...

To guarantee each laboratory greater productivity without compromising the data quality, CrestOptics has created the **X-Light V2**, the most accessible spinning disk solution for fast and gentle confocal imaging,

The spinning disk allows a fluid widefield/confocal transition providing the **true Z optical sectioning in one-click.**

The wider FOV up to 25mm translates into **more information** collected and **less tiles** required to cover a large specimen.



The X-light V2 is a truly enabling technology where the high-performance is combined with the **application flexibility and a universal compatibility** with any upright and inverted microscopes with a camera port.



CrestOptics offers the freedom to choose the **disk geometry that best suits the application** (i.e., deep imaging, fast live imaging).

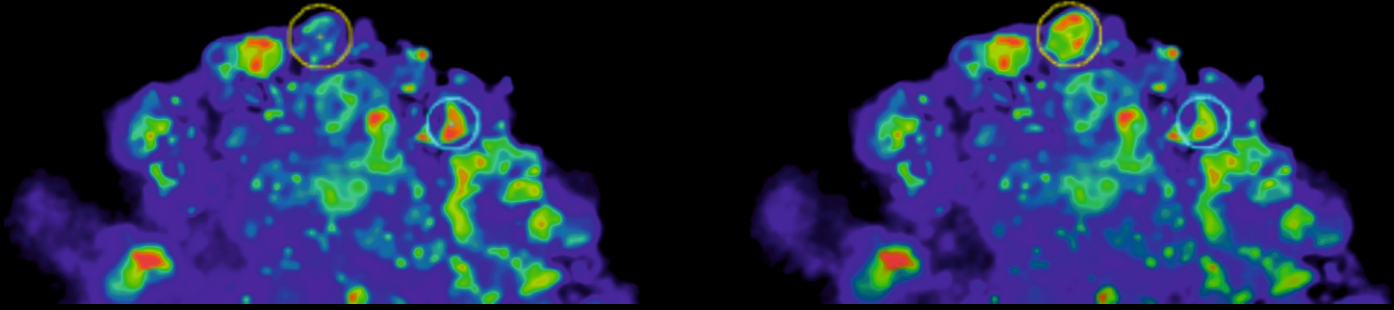


With the perfect match with pinhole size and high light throughput the X-light V2 can be coupled with **LED and LASER** light source.



Custom-designed lenses are optimized to perform with a wide range of wavelengths **from UV to near NIR** to use a large variety of fluorophores.

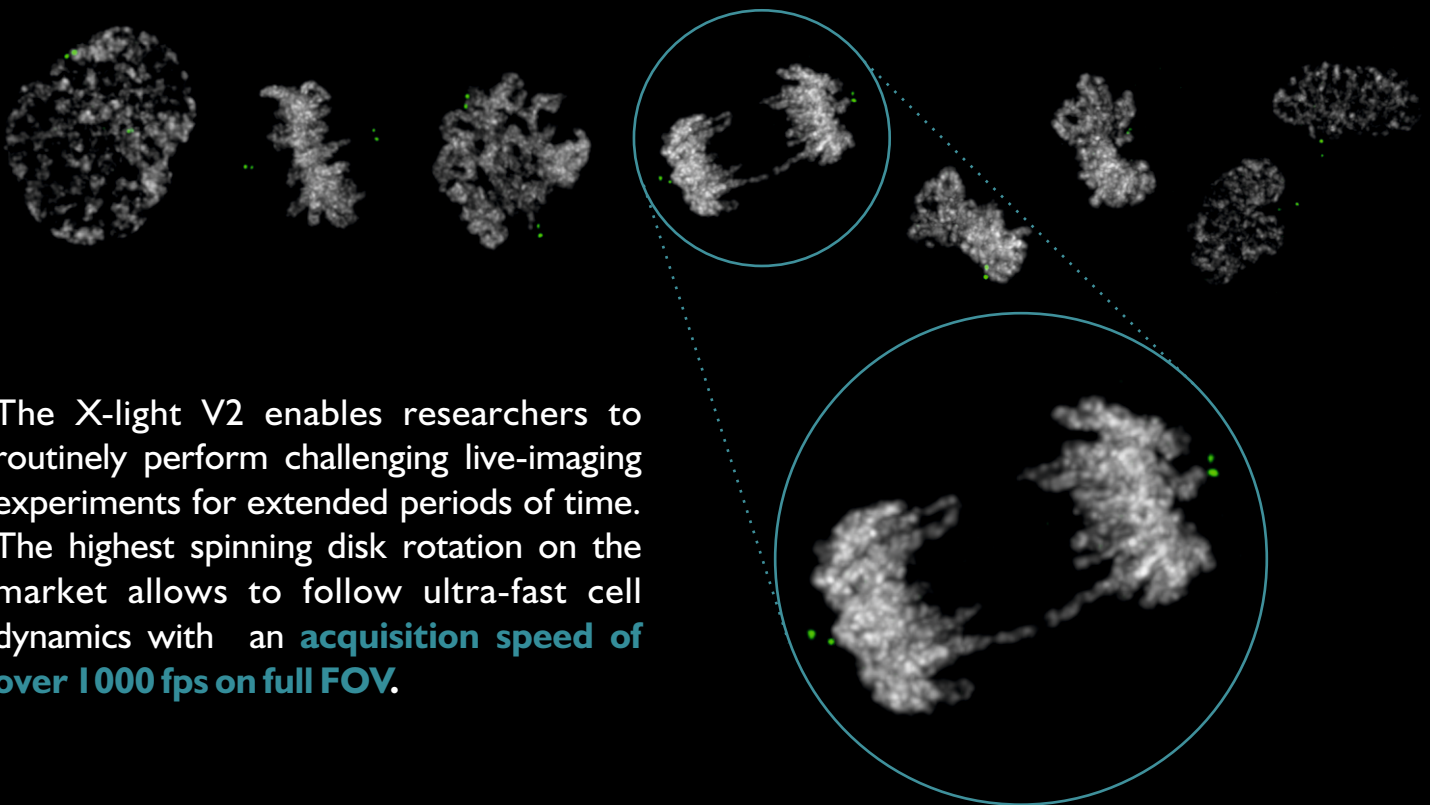
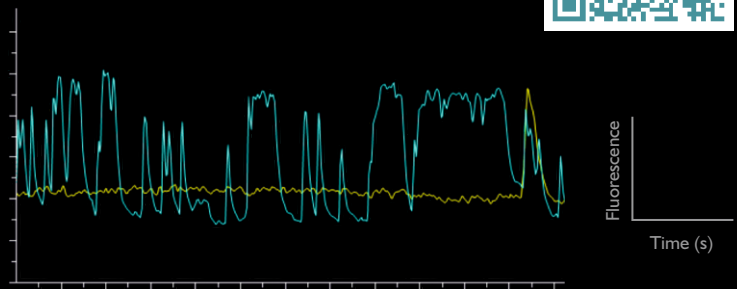
taking care of your samples



Fast live imaging of Ca^{2+} flux in β -cells of pancreatic islet triggering glucose-regulated insulin secretion. 60X oil objective. The graph below shows representative Ca^{2+} traces of active cells expressed as fluorescence fluctuations over time. Scan the QR code to watch the full video



The X-light V2 enables researchers to routinely perform challenging live-imaging experiments for extended periods of time. The highest spinning disk rotation on the market allows to follow ultra-fast cell dynamics with an **acquisition speed of over 1000 fps on full FOV**.



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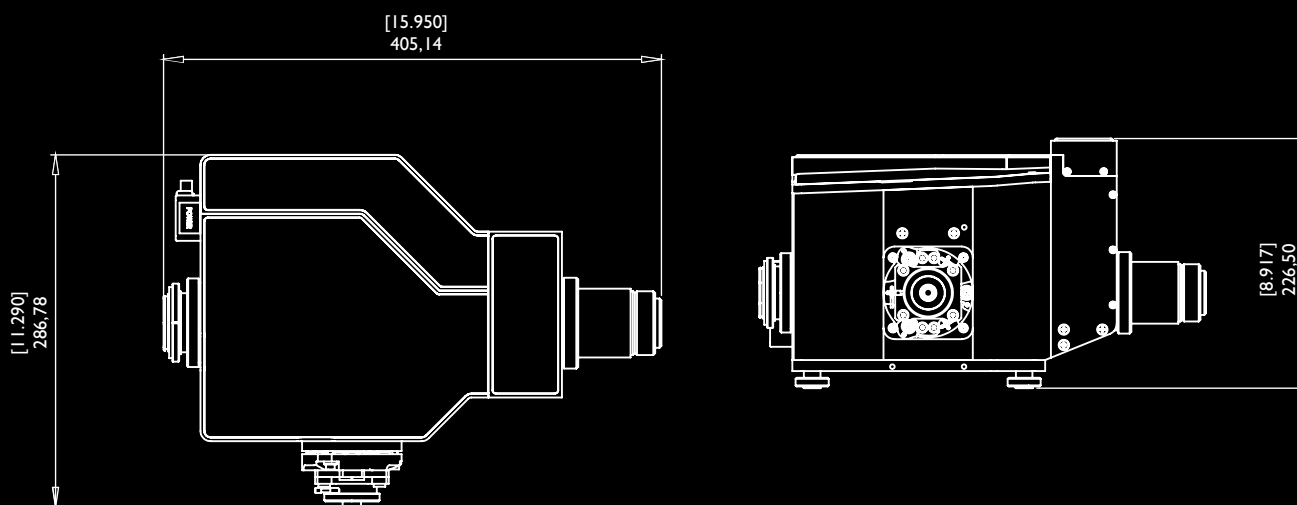
RPE1 cells stably expressing CETNI-GFP (green) undergoing mitosis in treated conditions. SiR-DNA is shown in white. LED illumination, 100x 1.45 NA oil objective. 3D time-lapse of 16 hours. MIP 25 z-slices collected in 600nm Z step. Scan the QR code to watch the full video.



Specifications

Imaging modalities	Widefield / Confocal
Compatible microscopes	Full range of upright and inverted microscopes
FOV	Up to 25mm diameter
Light Source	LASER with 1,5mm SMA LED with 3mm LLG
Spectral range	Excitation 400-750 nm / Emission 400-850 nm Excitation 400-1000nm/Emission 400-1000nm (X-light V2 VIS-NIR edition)
Camera	Compatible with CCD/EMCCD cameras and sCMOS cameras
Disk speed/scan rate	15000 RPM / > 1000 fps
Spinning disk geometry (diamater/spacing)	50/250 slit for high throughput & live imaging applications 50/250 μ m pinholes optimized for LASER light source 60/220 μ m pinholes optimized for LED light source Custom geometry and double pattern disks available on demand
Resolution	Lateral Resolution (FWHM): $\sim$ 230 nm (High NA 1.4) Axial Resolution (FWHM): $\sim$ 600 nm (High NA 1.4)
Filter wheels	Motorized filter wheels: 4-positions cleanup filter wheel, 3-positions dichroic filter wheel, 8-positions emission filter wheel.
Software	Nikon NIS-Elements / Micro-Manager / MetaMorph / Volocity / VisiView
Recommended Installation Conditions	Temperature $23 \pm 5^\circ\text{C}$, Humidity 70% RH or less (no condensation)
Weight	11.0 Kg (24.3 lbs)
Dimensions	11.2 (w) x 15.9 (L) x 8.9 (h) inches 286.7 (w) x 405.1 (L) x 226.5 (h) mm

Layout



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. January 2022 ©2022 CrestOptics S.p.A.



WARNING

TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.



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