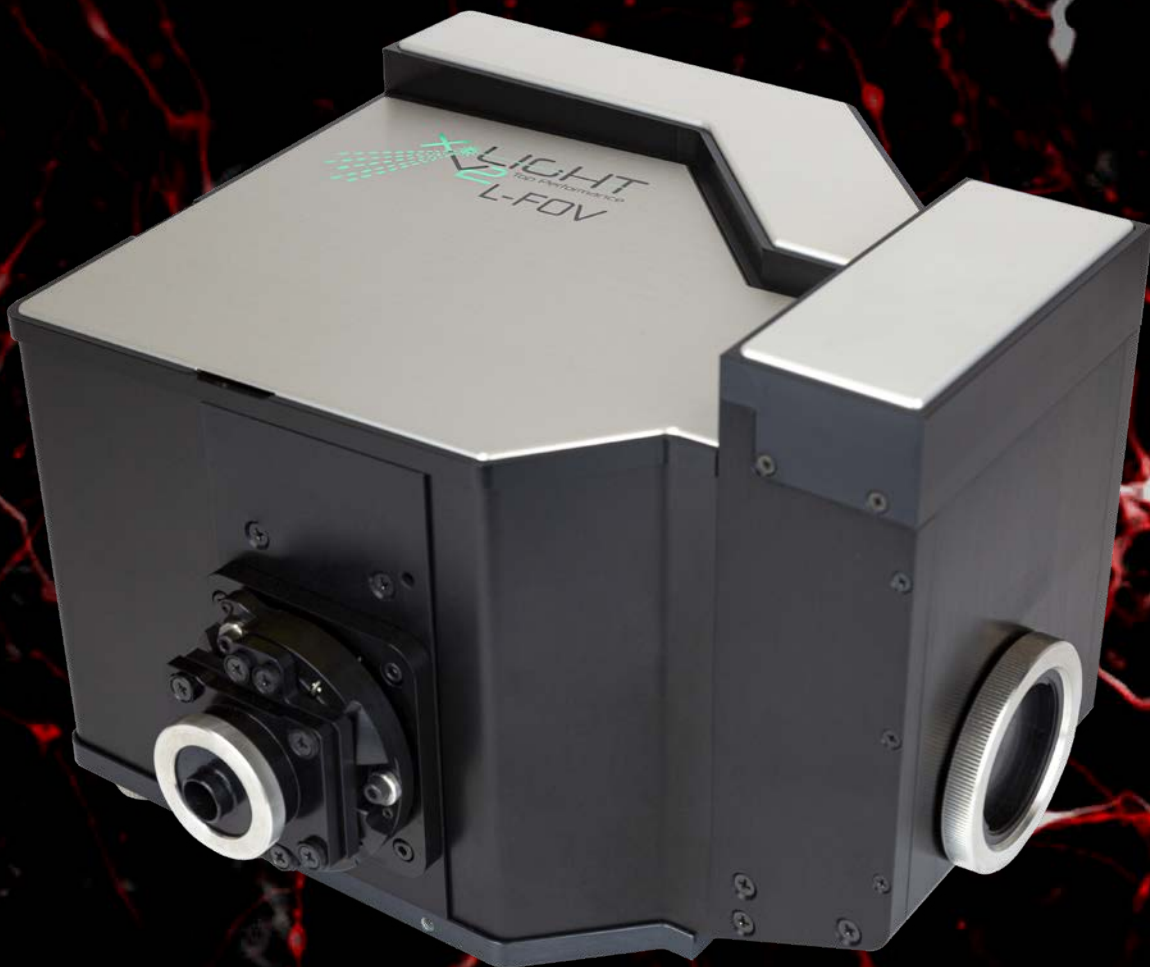




X-Light V2 Spinning disk confocal

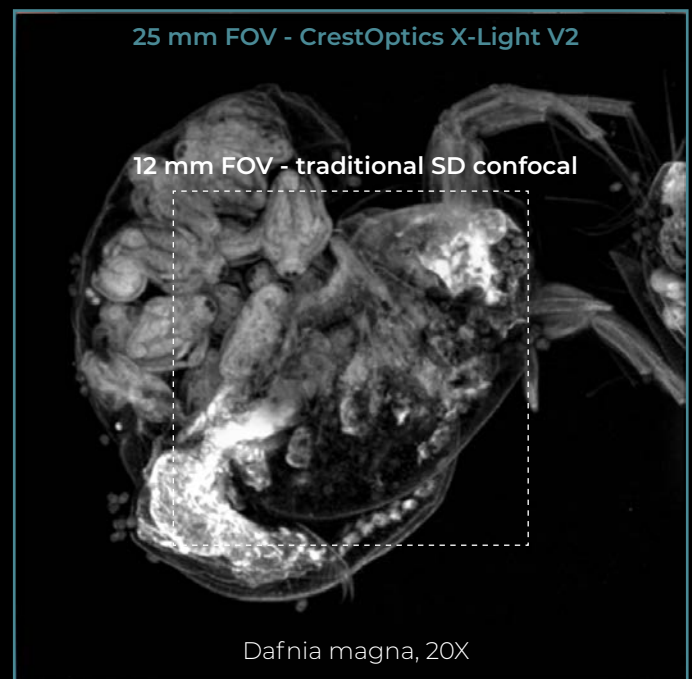
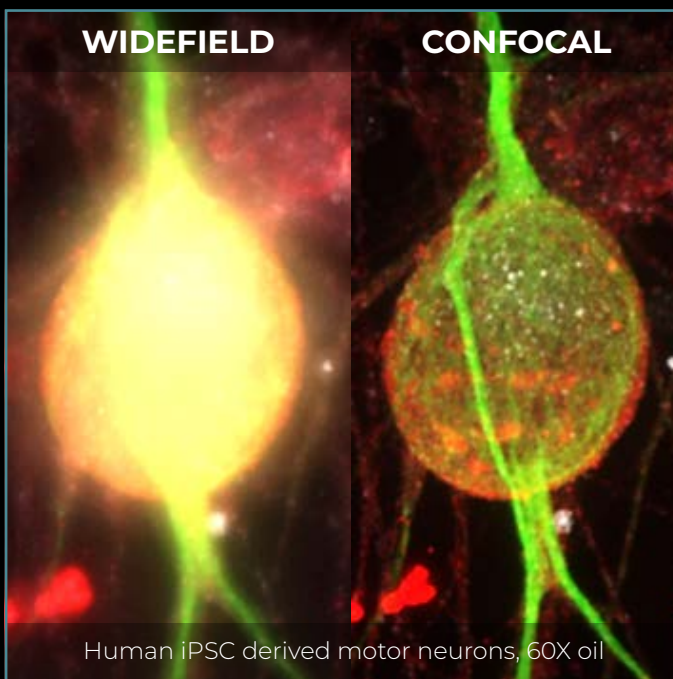


Accelerate the research process

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

The X-Light V2 allows a fluid widefield / confocal transition providing the real confocal **Z optical sectioning in one click.**

The wider FOV up to 25 mm 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 **application flexibility and universal compatibility** with any upright and inverted microscope with a camera port.



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

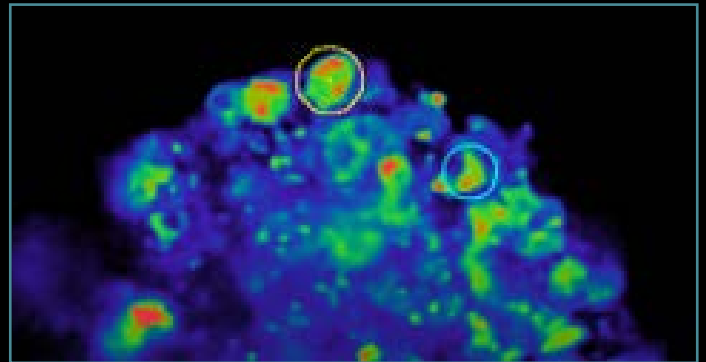
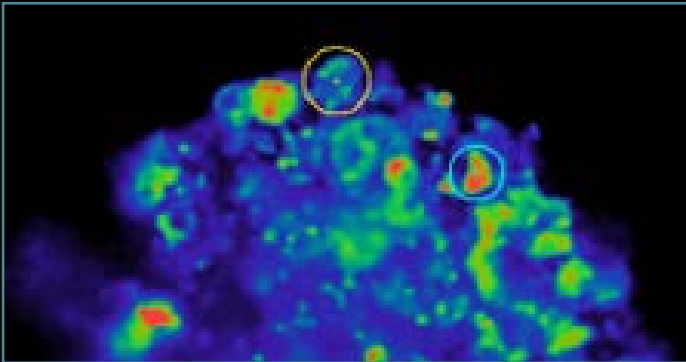


With the perfect match with pinhole size and high light throughput, the X-Light V2 can be coupled with **LED and LASER** light source.



Custom-designed lenses are optimized to perform within a wide range of wavelengths **from UV to near IR** allowing the use of various fluorophores.

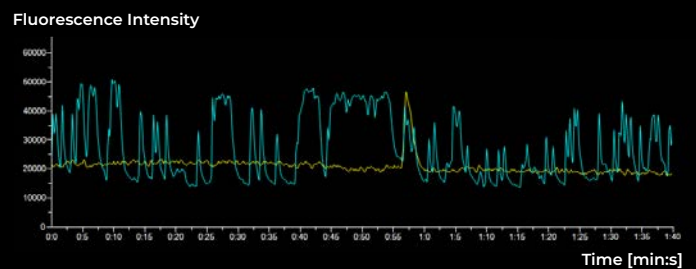
Take care of your samples



Fast live imaging of Ca²⁺ flux in β -cells of pancreatic islet triggering glucose-regulated insulin secretion. 60x oil objective. The graph below shows representative Ca²⁺ 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 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**.



The spinning disk method offers not only high-speed imaging but significantly reduced photobleaching and phototoxicity. This gentle illumination combined with advanced optical sectioning makes the X-Light V2 a **suitable solution for 3D live cell imaging**.

RPE1 cells stably expressing CETN1-GFP (green) undergoing mitosis in treated conditions. SiR-DNA is shown in white. LED illumination, 100x oil objective. 3D time-lapse of 16 hours. MIP 25 z-slices collected in 600 nm Z step. Scan the QR code to watch the full video.

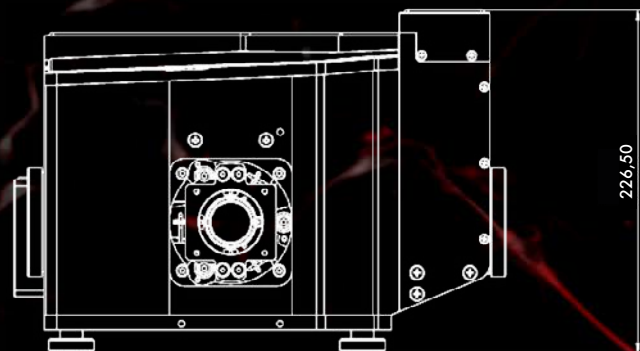
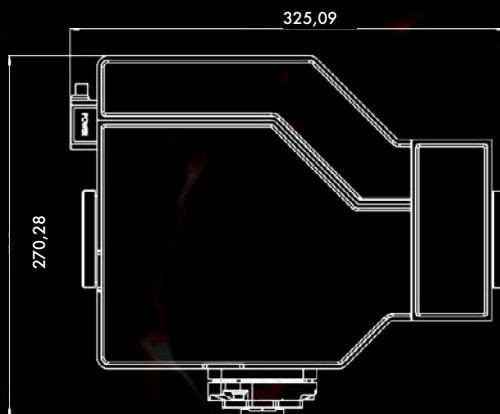


Specifications

Imaging modalities	Widefield/Confocal
Compatible microscopes	Full range of upright and inverted microscopes
FOV	Up to 25 mm diagonal
Light source	LASER with 1,5 mm SMA LED with 3 mm LLG
Spectral range	Excitation 400-750 nm / Emission 400-850 nm
Camera	Compatible with CCD/EMCCD cameras and sCMOS cameras
Disk speed/scan rate	15000 RPM / > 1000 fps
Spinning disk geometry (diameter/spacing)	50/250 μ m pinholes optimized for LASER light source 60/220 μ m pinholes optimized for LED light source Slit spirals for high throughput & live imaging applications Customized disk available upon request
Resolution	Lateral Resolution (FWHM): ~230 nm (High NA 1.4) Axial Resolution (FWHM): ~600 nm (High NA 1.4)
Filter wheels	Motorized filter wheels: 8-positions excitation filter wheel, 5-positions dichroic filter wheel, 8-positions emission filter wheel.
Software	NIS Elements / μ Manager / MetaMorph/ Volocity / VisiView®
Recommended installation conditions	Temperature $23 \pm 5^\circ$ C, Humidity 70% RH or less (no condensation)
Weight	11.0 Kg (24.3 lbs)
Dimensions	270 (w) x 325 (l) x 226.5 (h) mm 10.6 (w) x 12.8 (l) x 8.9 (h) inches

Layout

Unit: mm



CrestOptics S.p.A.
Via di Torre Rossa 66,
00165, Roma (RM)
www.crestoptics.com
info@crestoptics.com
+39 06 6147496

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. The product is in compliance with the CE Mark and laser-safety test. To ensure correct usage, read the corresponding manuals carefully before using your equipment

August 2023 ©CrestOptics S.p.A.