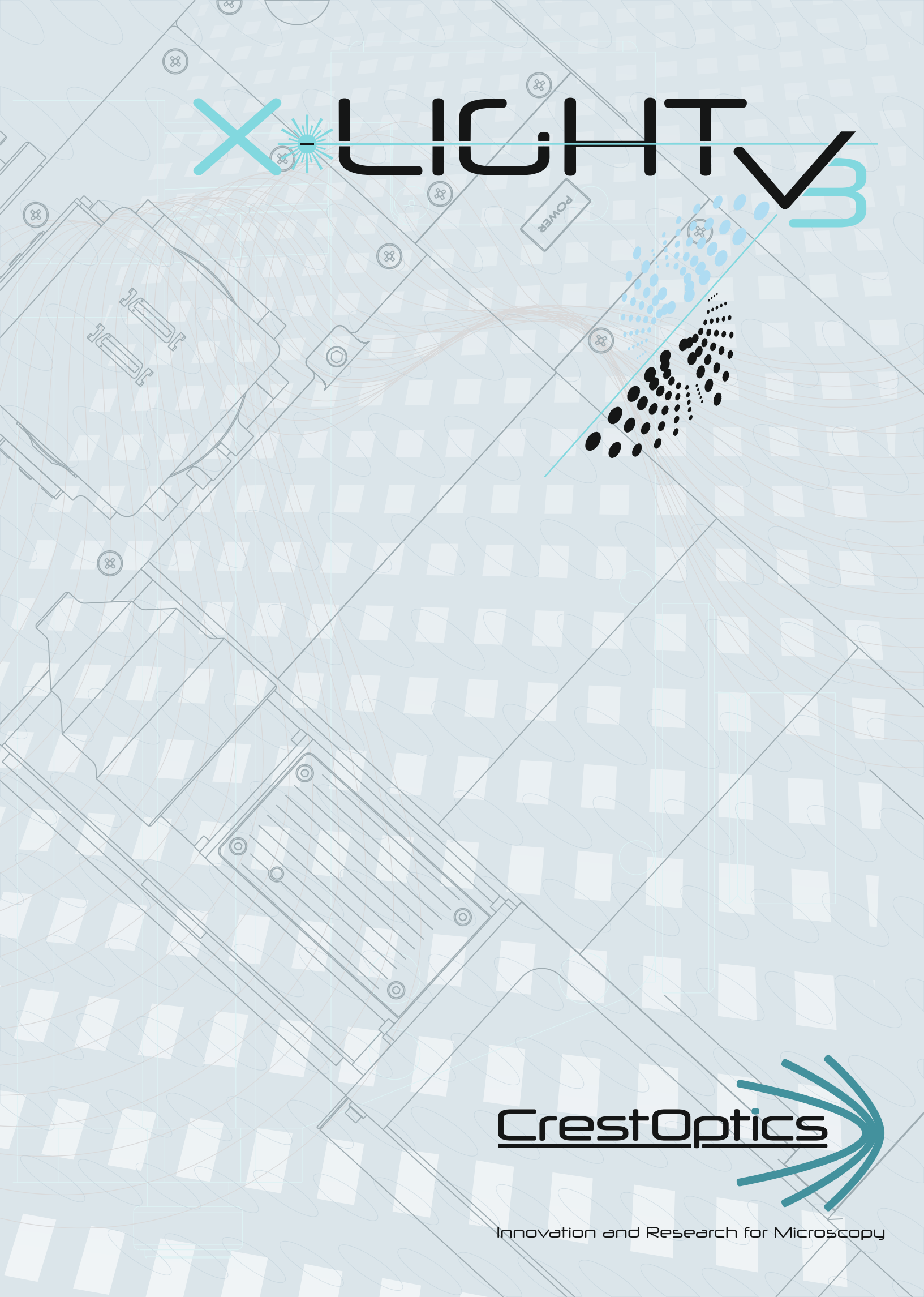


X LIGHT V3

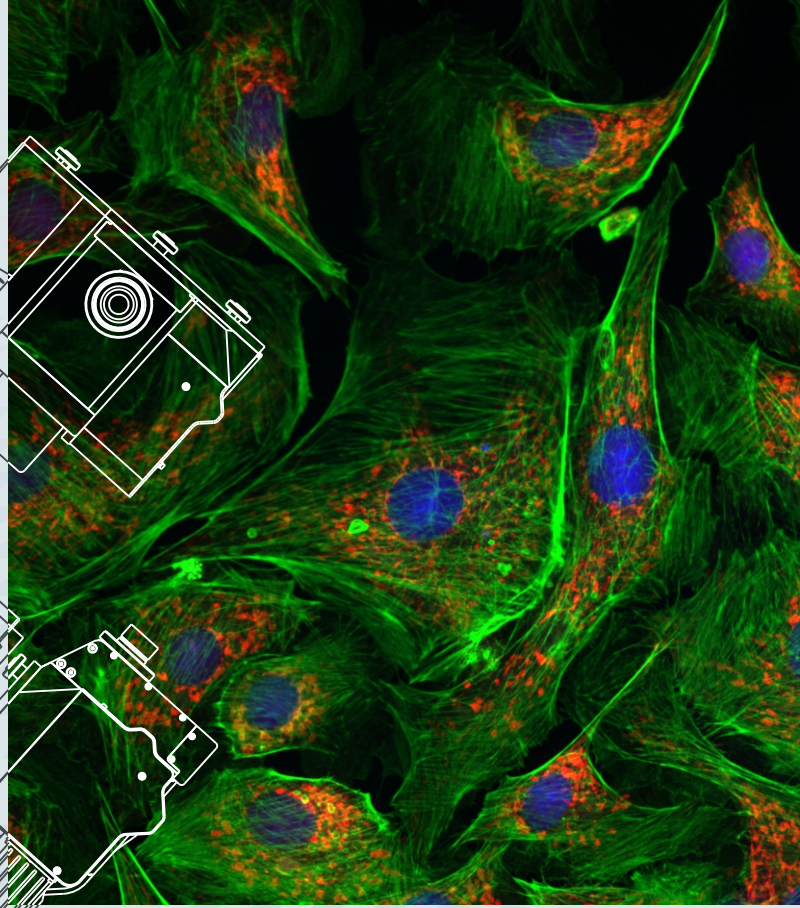
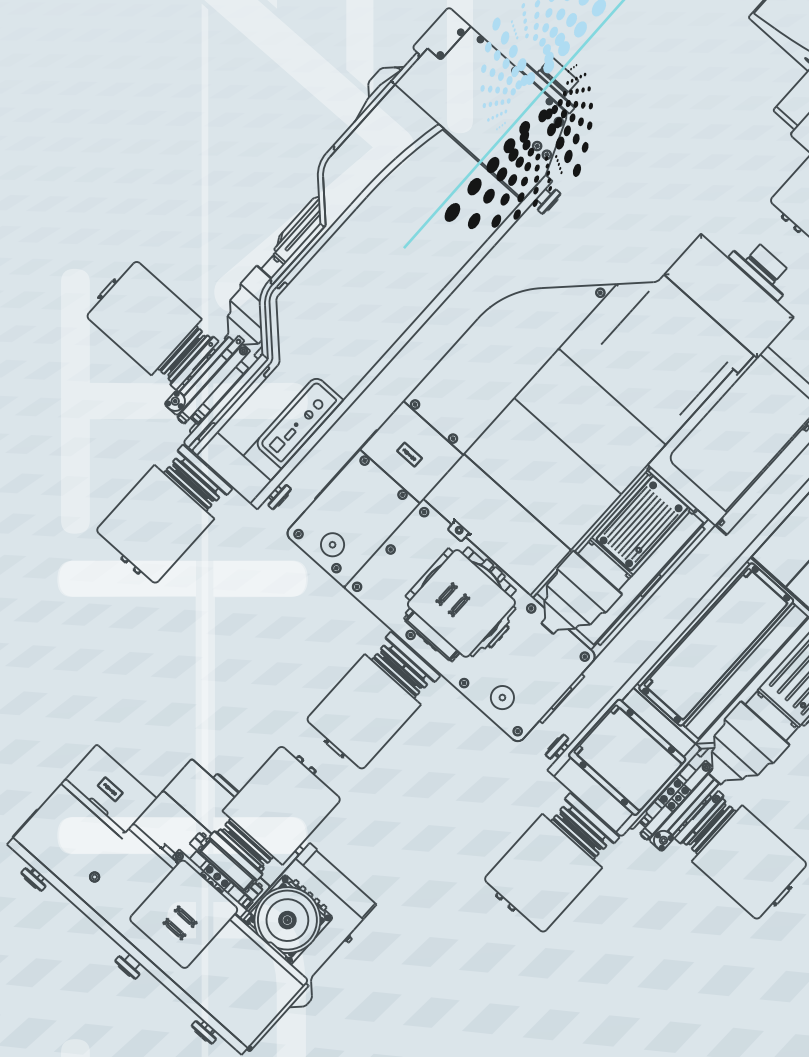


CrestOptics



Innovation and Research for Microscopy

X-LIGHT V3



X-Light V3 is the next generation of X-Light spinning disk confocal head series.

It relies on the cutting-edge technology, custom optical design approach and engineering solutions developed by CrestOptics to meet the very high-end specifications required by most of the modern fluorescence microscopy applications.

Thought to break-down the background fluorescence, thought to be extremely efficient and homogeneous in illuminating large field of view in single and dual-camera modes, thought to be extremely flexible in illumination shaping and sizing. It's a new powerful tool to catch very low light levels and produce even brighter images.

The new spiral pattern design, now available on all X-Light confocals, enhances the confocal sectioning to an optimal level and minimizes photobleaching over long time-lapse acquisitions.

Finally, the automated bypass mode between widefield and confocal imaging makes it the ideal upgrade for any existing fluorescence microscope.

Main Features

- Spectral range (confocal/widefield): 400-750nm
- Fully automated experiments
- Software controlled bypass mode: widefield to confocal
- The fastest spinning disk in the market: 15.000 rpm rotation speed, up to kHz range
- Choose your disk: 50um pinholes in two different versions based on different pinole spacing
- Choose your disk: unique continuous spiral disk makes it faster for high-speed applications
- User inspired: customize pinhole size and geometry
- Exchangeable, synchronized and sealed: the disk box is one of the most versatile features of the new V3. Dust protection and synchronization signals out to the camera make it reliable and faster.
- Lateral resolution (FWHM): ~ 230nm (High NA 1.4) diffraction limited
- Axial resolution (FWHM): ~600 nm (High NA 1.4)
- High Confocal Quality: this advanced new series brings in a redesigned optical layout optimized to enhance sensitivity and signal-to-noise ratio in any dim and bright conditions
- Ultra-large field of view imaging: maximum 25 mm
- Dual-camera view: simultaneous dual-camera view up to 25 mm each camera
- Software controlled filter cubes: 3 positions for simultaneous dual-color imaging
- Illumination uniformity: microlenses based for high uniformity across the full field of view
- Illumination FOV: different options to match different camera sizes and enhance efficiency
- Illumination shaping: preserve your sample. Motorized aperture to cut illumination in the region surrounding the region of interest
- Software controlled filter wheels: 4-positions automated cleanup filter wheel, 3-positions automated dichroic filter wheel, 8-positions automated emission filter wheel