

# OPTOSPLIT II BYPASS

DATASHEET

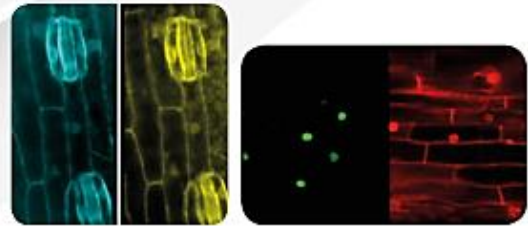
## Engineered for super resolution quality

Two-way image splitter with enhanced performance and simple bypass mode

The Optosplit II Bypass image splitter is a simple and elegant device for dividing an image into two separate, spatially equivalent, components that can be displayed side by side on a single camera sensor.



The Cairn OptoSplit II BP is our best ever dual channel simultaneous imaging device for use with a single camera. It builds on the success of the OptoSplit II, but adds a convenient single lever bypass mode making it more suitable for multi-user microscopes where simultaneous dual channels are only required for specific experiments alongside single wavelength recordings.



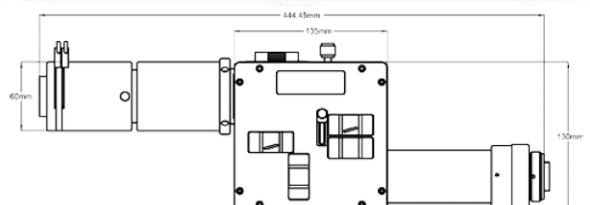
Whilst maintaining compatibility with the OptoSplit II, the BP version now supports our new flat-face filter cubes and has enhanced long-term stability, pixel registration and reproducibility. Featurewise, the rapid Bypass control is complimented by additional space for more auxiliary components. It has a slightly larger footprint than the OptoSplit II and consequently can use longer focal ratio lenses with even better off-axis performance.

### KEY BENEFITS

- Integral C-mount input and output ports (optional T or F mount)
- Simple & precise controls for image registration
- Interchangeable filter / dichroic holders
- Single lever switching from split to bypass
- 425nm to 875nm coatings on all surfaces
- 1X or 1.3X magnification
- Support for Large Sensors (LS) - 16.6 x 14 mm

### APPLICATIONS

- Förster Resonance Energy Transfer (FRET)
- Ratiometric calcium, voltage & pH imaging
- Simultaneous multi fluorescent probe imaging
- Total Internal Reflection Fluorescence (TIRF)
- Spinning disk confocal
- Single Plane Illumination Microscopy (SPIM)
- Super resolution STORM / PALM / SIM
- Polarisation studies (anisotropy)
- Simultaneous dual depth imaging (using independent lenses)
- 3D super resolution PALM/STORM (using cylindrical lenses)
- Simultaneous phase contrast / DIC and fluorescence



## MULTICHANNEL EMISSION SPLITTING RANGE

NO.1 IN OPTICAL PERFORMANCE, STABILITY AND USABILITY

DATASHEET



### OptoSplit II & III

With an elegant configuration for simple side by side image splitting and optimised for sensors up to 18.8mm diagonal, the OptoSplit delivers high throughput imaging at a realistic price. Ideal for FRET, ratiometric imaging, polarisation studies and most simultaneous imaging applications requiring two or three images. User-configurable cubes and intuitive x, y and focal adjustments offer convenience and simplicity.



### OptoSplit II Bypass

This builds on the success of the OptoSplit II, but adds a convenient single lever bypass mode making it more suitable for multi-user microscopes where simultaneous dual channel imaging is required for specific experiments alongside single wavelength recordings.



### MultiSplit

Up to four channels simultaneously on one camera chip! The MultiSplit uses the four quadrants of a single camera in a 2x2 square format. The MultiSplit has the further possibility of simultaneous multi-depth imaging which is particularly attractive, as we can now do this at four depths rather than just two or three.



### Multi Camera Adapters

Splitters for up to four channel imaging using multiple cameras (up to 22mm diagonal). Perform simultaneous recording, polarisation states or z depths without having to reduce their size. Variable rectangular aperture allows for the use of cropped sensor modes for the fastest speeds. Now with new more rigid camera mounting clamps and magnetically aligned filter cube facility.