

# OPTOSPLIT III

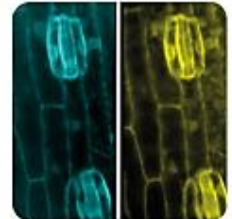
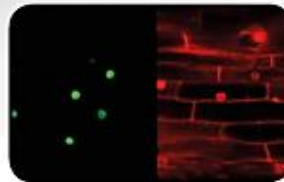
## Three-way image splitter

The Optosplit III triple image splitter from Cairn Research is a simple device for dividing an image into two, or three separate, spatially equivalent components which can be displayed side-by-side on a single camera chip.



DATASHEET

Splitting is usually performed on the basis of wavelength and/or polarisation, allowing applications where there is a requirement for simultaneous, or high speed acquisition of multiple image emission bands or polarisation states. The simultaneous acquisition of up to three images offers a major benefit over manual or electronic filter changers, as there is no longer a need to pause acquisition while the filter position is changed. This allows your camera to be operated in high speed stream modes and reduces demands on the software.

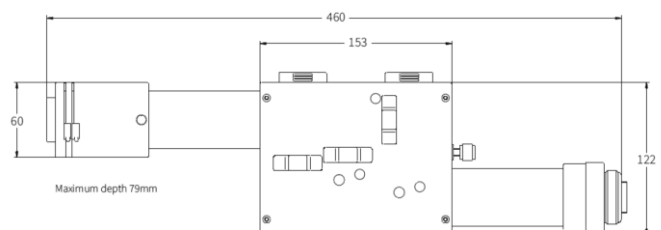


### KEY BENEFITS

- Optimised for sensor sizes up to 18.8mm diagonal (13.3x13.3mm)
- User configurable filter cubes with industry standard filters/dichroics for dual or triple emission separation
- Magnification options - please ask for details
- Bypass mode to allow single wavelength imaging using central channel
- Intuitive and independent x/y controls for simple alignment
- Accommodates ND filters or chromatic correction lenses
- Standard spectral range from 425nm to 875nm
- Supports cropped sensor modes
- Adjustable rectangular aperture for user defined field of view
- C-mount coupling to microscope or camera lens

### APPLICATIONS

- Triple fluorescence probe studies
- Polarisation Förster Resonance Energy Transfer (pFRET)
- Ratiometric calcium, voltage & pH imaging
- Polarisation studies (anisotropy)
- Simultaneous phase contrast / DIC and fluorescence
- Simultaneous multi-depth imaging



## 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.