

MULTICAM

DATASHEET

Multi-emission imaging using multiple cameras

Engineered for super resolution quality

With custom designed optics, the Cairn Multicam offers superior image quality on camera sensors up to 13.3x13.3mm. The unit accommodates three of our standard filter cubes allowing light to be distributed on the basis of wavelength, polarisation state or focal depth. Each cube has fine mechanical X-Y adjustment for pixel overlay or deliberate image offset. The input of the instrument has a variable rectangular aperture enabling the use of cropped sensor mode on all detectors. Each port can be fitted with different magnification optics to accommodate all popular sensor sizes and a wide range of fields of view. As the internal optics are infinity corrected, manual or motorised filter changers can also be fitted to input and output ports.



APPLICATIONS

- Förster Resonance Energy Transfer
- Simultaneous use of multiple dyes or genetic markers
- Ratiometric imaging
- Polarisation studies
- Simultaneous transmitted light and fluorescence
- Simultaneous high speed and high resolution
- Simultaneous multi Z depth imaging

KEY BENEFITS

- Can be configured for up to 4 cameras and easily upgradeable
- Choice of magnifications (upon request)
- Simple alignment and focussing
- Rapidly interchangeable cubes
- Improved camera clamps for enhanced rigidity on both upright and inverted frames

MULTICHANNEL EMISSION SPLITTING RANGE

DATASHEET

NO.1 IN OPTICAL PERFORMANCE, STABILITY AND USABILITY



OptoSplit II & III

With an elegant configuration for simple side-by-side image-splitting, and optimised for large-sensor cameras, 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

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.



TwinCam

Splitter for dual channel imaging using two camera (upto 22mm diagonal). Perform simultaneous recording of two channels, 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, magnetically aligned filter cube and pupil plane adjustment facility.



MultiCam

Similar to the TwinCam, but can accommodate up to four 22mm diagonal cameras. Variable rectangular aperture allows for the use of cropped sensor modes for the fastest speeds.



OptoMask

Enables precise FOV control for the high-speed, cropped sensor mode offered by several camera manufacturers including Andor and Roper Scientific. Supports up to 22mm diagonal sensors.



OptoSpin

An intelligently designed, fast-spinning and stepping filter wheel. This slim unit has low inertia, enabling smooth operation and the ability to change between emission filters at 100Hz when synchronised with a suitable light source. Change filters without moving the camera. Mount two units together in the same 35mm optical path length for versatile combinations. (6 position for one filter wheel, 10 position for two).



Infinity Cube Coupling

Specifically designed for Optogenetics, flash photolysis, FRAP and widefield fluorescence, the Cairn Infinity Cube gives scientists direct access to the infinity-space of commercial upright microscopes and macroscopes. This allows for the efficient and flexible coupling of multiple independent light sources with each optimised for a different field of view, wavelength, polarisation state and / or other property.