

# OPTOSPIN32

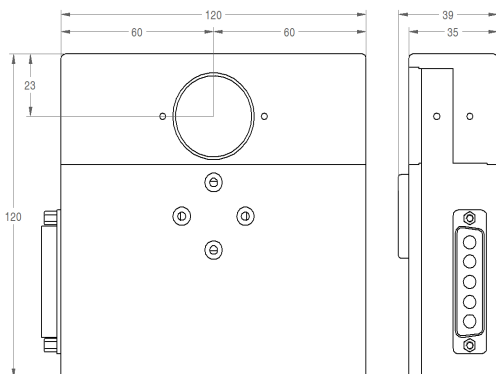
## 32mm fast spinning and stepping filter wheel

DATASHEET

The Optospin32 is a further continuation of our long tradition in filter wheel design, dating back to the 1980s, but taking full advantage of the developments that have taken place in motor and control technology since then. It again uses our tried and tested approach of mounting the motor directly in the hub of the filter wheel, in order to maintain a compact size with low motor inertia and no need for any form of indirect drive connection. It's the bigger brother of our well established Optospin25 design, and as its name suggests, it takes 32mm rather than 25mm filters, in order to meet the steadily increasing number of occasions where larger beam diameters are required. The higher inertia of its necessarily somewhat larger diameter has been countered by use of a correspondingly more powerful motor, so its stepping time between filters is barely longer, and like its sibling it can spin continuously at up to 7.500 rpm too.

### APPLICATIONS

- Multi channel fluorescence imaging
- High speed ratiometric imaging
- FRET
- Spectrophotometry
- Low-vibration microscopy



OPTOSPIN OVERALL  
DIMENSIONS (mm).



### KEY BENEFITS

- Stepping times down to 40msec between adjacent filters, 70msec between opposite ones
- Continuous spinning up to 7,500 rpm, set by internal or external reference frequency
- Compact size, only 120 x 120 x 35mm (with additional central 4mm power bulge)
- Two filter wheels can be mounted within the same overall 35mm optical path length
- Simple filter loading system (leaves camera in place)
- Six 32mm filter positions per wheel
- Paired wheels can simulate a single ten-position wheel, with substantial speed advantage
- USB drivers for various software packages
- Universal controller for both our OptoSpin25 and OptoSpin32
- Digital control option for external software control
- Wide range of microscope adapters for illumination and detection

# 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, 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 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 (each). Perform simultaneous recording of multiple wavelengths, polarisation states or z depths using the full camera FOV without having to reduce their size. Variable rectangular aperture allows for the use of cropped sensor modes for the fastest speeds. Includes interchangeable camera mounts for C, F and T-mount cameras.



## OptoMask

Enables precise FOV control for the high-speed, cropped sensor mode offered by several camera manufacturers including Andor and Teledyne..



## OptoSpin 25 & 32

An intelligently designed, fast-spinning and stepping filter wheel, now with 25mm and 32mm wheels available and a range of microscope adapters. This slim unit has low inertia, enabling smooth operation and the ability to step between emission filters in 30ms, and spin continuously at 7500rpm when synchronised with a suitable light source. Change filters without moving the camera and mount two units together in the same 35mm optical path length for versatile combinations. (6 position for one filter wheel, 10 position for two).

