## **Datasheet**





### OptoSpin32

#### 32mm fast stepping filter wheel

The OptoSpin32 is designed for advanced fluorescence imaging and high-precision optical applications, offering researchers a powerful solution for demanding experiments. With its ability to accommodate 32mm filters, this system supports a larger field of view compared to smaller filter wheels, making it ideal for applications requiring wide-area imaging, such as live-cell microscopy and high-content screening. The increased filter size ensures more uniform illumination, reduces vignetting, and improves light collection efficiency, leading to higher signal quality. Following our proven design philosophy, the motor is mounted directly within the hub of the filter wheel, eliminating the need for bulky external drives while minimizing inertia. Despite its larger filter size, the OptoSpin32 maintains exceptionally fast stepping speeds thanks to a high-torque motor, ensuring rapid filter transitions without compromising performance.

#### **Applications**

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

#### **Top Advantages**

- Two filter wheels can be mounted within the same overall 35mm optical path length
- · Additional external control options
- Wide range of microscope adapters for illumination and detection

#### Key Features

- Stepping times down to 40msec between adjacent filters, 70msec between opposite ones
- Compact size, only 120 x 120 x 35mm (with additional central 4mm power bulge)
- 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

# The OptoSpin32 can be coupled to various other Cairn Research and third-party products



The OptoSpin can be coupled to the outputs of our multi-camera image splitters



Or it/they can be coupled directly between the microscope and camera.

The OptoSpin power supply is used with both the OptoSpin25 and OptoSpin32

