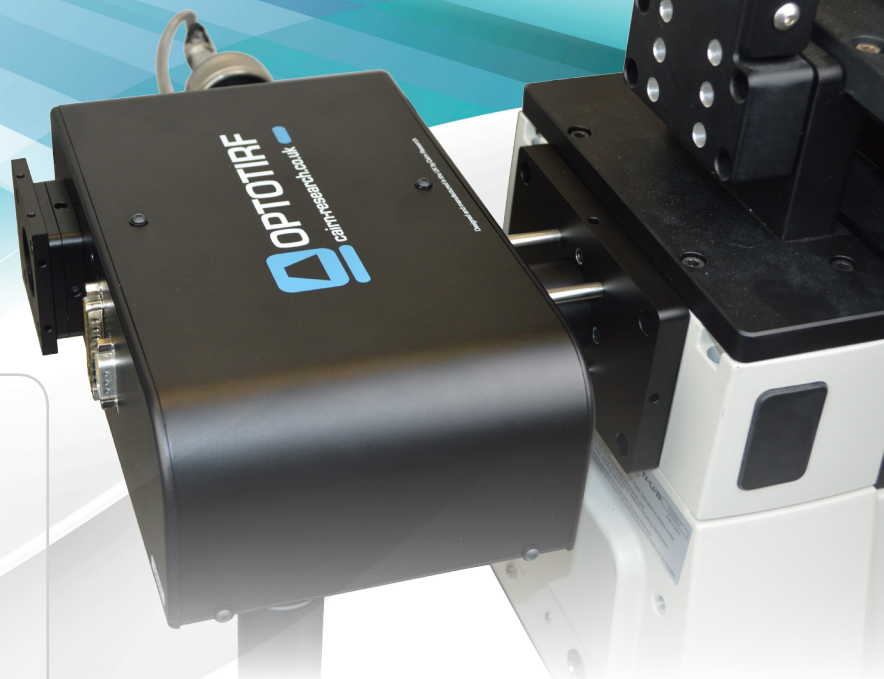
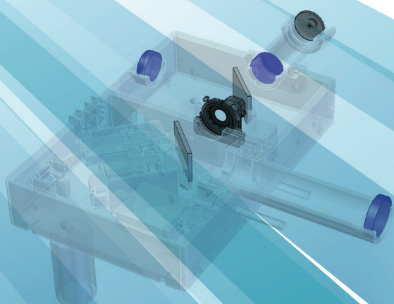


## Affordable Motorised Total Internal Reflection Fluorescence and Widefield Illumination



The OptoTIRF is a compact and powerful, yet inexpensive, motorised TIRF illuminator designed to fit onto any research-grade inverted microscope. It gives the researcher intuitive and dynamic access to the entire back aperture of the objective with joystick or software control and simple storage and recall of preset positions. This makes it suitable for acquisition protocols involving TIRF and / or oblique illumination at a range of penetrations depths and wavelengths. Full, 360 degree, positioning and the ability to image at multiple points makes it straightforward to tweak the illumination to the sample and minimise fringes or shading gradients. Flexibility is further enhanced by a motorised tube lens for automatic correction for different height sample dishes, or different magnification TIRF lenses, and a motorised bypass for widefield illumination using LEDs or a liquid light guide.

### APPLICATIONS

- Single molecule localisation & tracking
- Kinetic studies of single molecule interactions (i.e. ligand binding, protein: protein and protein: DNA interactions)
- Kinetic studies of proteins (i.e. actin filaments & microtubules)
- Super-resolution techniques (i.e. PALM/STORM) for subdiffraction localisation of single molecules

### KEY BENEFITS

- Motorised movement of illumination spot for optimised point TIRF/oblique illumination
- Joystick or software control – simple COM commands work with any software
- Motorised widefield bypass mode
- Accommodates single mode or (small) multimode fibre input
- Direct focusing of “TIRF” lens inside microscope frame
- Integrated field stop
- Simple optical path suitable for adaptation/optimization

