

FURALED Light Source Compact and optimised LED illuminator

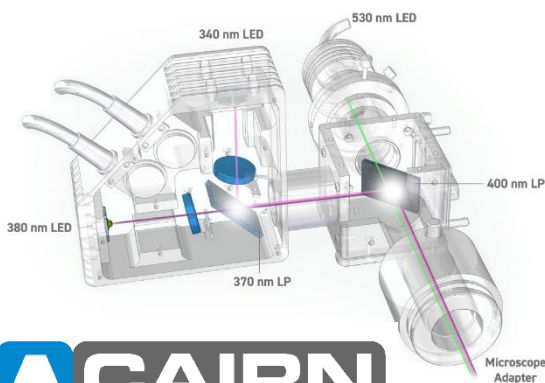
DATASHEET

Fast, Stable Calcium Imaging

We introduced LED based Fura-2 systems five years ago, but only with 360nm isosbestic ratioing (due to limitations in LED availability). We are delighted to now offer full 340nm / 380nm ratioimetric Fura-2 imaging with integrated excitation filters. Similarly, the LED configuration for Fura-8 is also available.

Ratioimetric calcium imaging with LEDs can work very well, but, due to the relatively narrow bandwidths and spectral variations of individual LEDs, it does require attention to detail. The FuraLED head works directly with our OptoLED controller and makes the process simple, as we take care of the LED selection and intensity regulation to make your experiments work.

We understand that most researchers will also want to use visible indicators and, quite likely, their existing light source alongside the FuraLED. To simplify this the coupling is equipped with a straight-through port to accommodate any fibre based illuminator, or additional Cairn LEDs.



APPLICATIONS

- Fast calcium imaging and photometry
- FuraLED / GFP coupling combination
- Fura-2 (340nm / 380nm) or Fura-8 (365nm / 405nm)

KEY BENEFITS

- Full range of microscope / macroscope couplings available
- Sub-millisecond digital and analogue switching
- Compatible with existing OptoLED controllers and Cairn microscope couplings
- OptoLED controller provides dual digital inputs for combined software and direct camera connection to reduce photobleaching
- Couple to Cairn Multistream for calcium imaging at maximum camera frame rates