

**NEW**

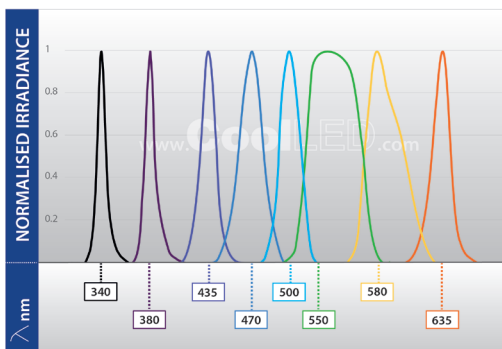
# LED Microscopy Illumination for Neuroscience



## Supercharged calcium imaging and beyond: **NEW pE-800<sup>fura</sup>**

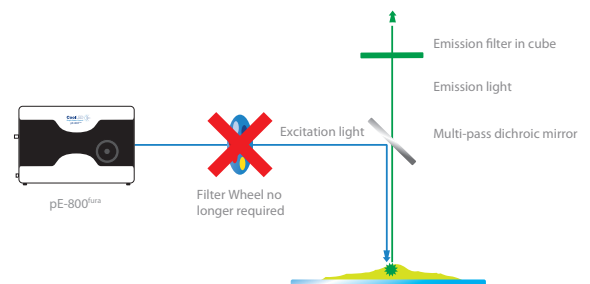
Discover more with the most intuitive and controllable 8-channel Microscope Illumination System available for neuroscience researchers.

**Your Go-to Neuroscience Illuminator:** The pE-800<sup>fura</sup> supports your research in a range of applications and techniques, whether you rely on calcium imaging, pH monitoring, optogenetic stimulation, ratiometric fluorescence, FRET or everyday fluorescence.



**Fluorescence Freedom:** 8 powerful LEDs span 340-635 nm to cover all popular calcium and pH indicators, fluorophores and opsins from Fura-2 to Cy5, as well as novel fluorophores which become available in the future.

**Lightning-fast Microscopy:** Capturing high-speed events with the highest temporal resolution is possible thanks to industry-leading  $<7 \mu\text{s}$  TTL triggering and inline filter holders for high-speed Pinkel configurations.



**Affordable Automation:** The unique 8-channel Sequence Runner triggers automated excitation sequences with just a single TTL-out of a camera or external hardware. Combined with inline filters, this transforms a manual microscope into an affordable and powerful automated imaging system.

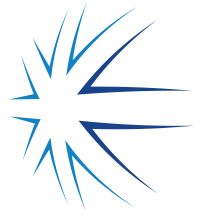
**Low Phototoxicity:** Protect your data from phototoxicity and photobleaching by careful optimisation via software, digital and analogue control, for example with individual channel switching and 0-100% irradiance control.



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# LED Microscopy Illumination for Neuroscience

**CoolLED**  
Simply Better Control



## Dedicated Fura-2 Imaging and Everyday Fluorescence: pE-340<sup>fura</sup>

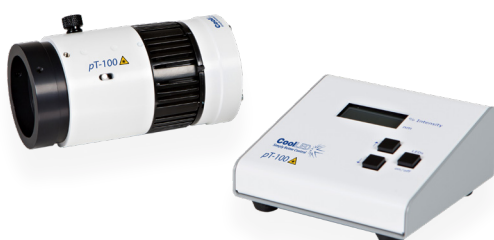
Bespoke LED Illumination System for Fura-2 ratiometric calcium imaging, which also supports everyday fluorescence microscopy.

- Dedicated 340 nm and 380 nm LEDs for Fura-2
- White LED for everyday fluorescence
- Fast, stable and controllable illumination
- Inline filter holders for high-speed Pinkel configurations
- Sequence Runner for automated excitation sequences from a single TTL-out

## Controllable Optogenetic Stimulation: pE-300<sup>white</sup>, pE-300<sup>ultra</sup>

Three-channel Illumination Systems for fast, precise optogenetic stimulation and everyday fluorescence microscopy.

- Broad spectral coverage of opsins
- High-speed  $<20 \mu\text{s}$  TTL triggering
- Connects to electrophysiology rig, stimulator and other hardware via multiple TTL inputs
- Delivers light through direct fit (maximum irradiance) or liquid light guide (no electrical noise)
- Inline filter holders for precise stimulation (pE-300<sup>ultra</sup> only)
- Sequence Runner for automated excitation sequences from a single TTL-out (pE-300<sup>ultra</sup> only)



## Transmitted Illumination: pT-100 770 nm

Simple and compact narrow bandwidth Illumination System, providing high-contrast illumination of thicker samples.

- Ideal for IR-DIC
- High-speed TTL control reduces exposure time
- Delivers light through direct fit (maximum irradiance) or liquid light guide (no electrical noise)