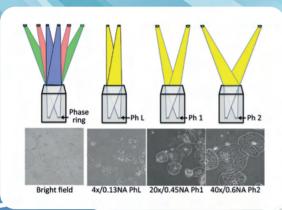
**AURA** 

DATASHEET

# PHASE CONTRAST ILLUMINATOR

Ultra long-distance phase contrast for inverted microscopes



The Cairn Aura phase contrast illuminator allows true Zernike phase contrast with a working distance up to 180 mm (clear working space!) for your most demanding experiments. Based on a concept developed by Webb et al. at the University of Nottingham, the Aura uses concentric rings of super-bright LEDs in place of the conventional condenser and phase rings. The Aura provides the highest-quality phase contrast images with very simple alignment and works with a selection of inverted research microscopes for electrophysiology, live cell imaging, and multimodal time lapse experiments. The Aura allows turn-key PhL, Ph1, and Ph2 and some darkfield imaging in white light or the near infrared (other colours on request).

### **APPLICATIONS**

- Phase contrast
- Bright field
- Electrophysiology
- Simultaneous fluorescence and transmitted light

### **KEY BENEFITS**

- Ultra long working distance for enhanced access
- Integrates with existing systems from Nikon & Olympus
- Simple and consistent alignment
- White light or NIR illumination for multimodel imaging



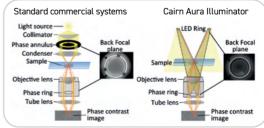


DIAGRAM DEMONSTRATING WORKING DISTANCE COMPARISON BETWEEN STANDARD CONDENSER AND AURA SYSTEM



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# **ILLUMINATION SYSTEMS**

# INTENSITY, STABILITY AND FLEXIBILITY

DATASHEET



# MultiLine LaserBank

Modular and versatile laser launch system allows for use of up to six solid-state lasers from multiple manufacturers. Ideal for TIRF, spinning disk confocal, FRAP and optogenetic applications or any combination of these with multiple outlets via single or multi-mode fibres. Provides the convenience of a custom, turnkey system.

#### — TriLine Laser Bank

The TriLine shares much of the modularity and flexibility of the MultiLine, but in a simpler and more compact package (up to 3 lasers). The design offers the flexibility to configure output ports via single or multi-mode fibres (or free space on request) for TIRF, FRAP, photolysis, spinning disk confocal, optogenetics and other research applications.

#### ) Aura Pro

Easy to use and affordable LED transmitted light source for phase imaging on a variety of inverted microscopes. Supports PhL, Ph1 and Ph2 phase objectives, or can be used as a standard brightfield transmitted light source. Triggerable, with an extended working distance ideal for use with micromanipulators.

# OptoLED

The OptoLED is our flagship system for LED illumination. Dual channel LED controller with ultra-high stability and "instantaneous" (sub-microsecond) vibration-free TTL switching and analogue intensity modulation.



#### 

Compact and affordable single LED white light illuminator for brightfield, phase contrast or DIC imaging, available with a wide range of microscope adapters. Convenient for any application requiring a simple LED illuminator.



#### OptoScan

The only monochromator that provides submillisecond control of both centre wavelength and bandwidth. Provides unmatched versatility for fluorescence measurements, photometry and optical scanning. A lab workhorse!



#### MultiPort Illumination Couplings

Easily and efficiently couples multiple light sources (light guide, laser or LED) into a single epi-illumination path. Well suited for optogenetics, photolysis and photoactivation. Can include independent field stops or pinholes.



#### OptoTIRF V2

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



# FuraLED

Compact and optimised LED illuminator for 340nm / 380nm ratiometric Fura-2 fluorescence imaging with intergrated filters. Fast switching with photodiode feeback stability when used in conjunction with our OptoLED dual channel LED controller. Couples to a variety of upright / inverted microscopes or macroscopes.



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