

MULTILINE

LaserBank

DATASHEET

Flexible, modular and upgradeable
Laser Launch for the biosciences

To take advantage of the introduction of increasingly powerful diode lasers at a wide range of wavelengths, the MultiLine LaserBank, offers the flexibility to have multiple output ports via single or multi-mode fibres for TIRF, FRAP, photolysis, spinning disk confocal, optogenetics and other research applications. The LaserBank is upgradeable and alignable on-site, and in addition to being a core component in our high end imaging systems, it is also designed as a standalone unit for biophysics laboratories or OEM suppliers to house a select range of commercially available lasers.



The system can accommodate up to six lasers which can be combined into up to six different fibres with arbitrary light distribution or sharing of wavelengths between ports. Mechanical shutters and galvanometer switching modules are available as required. The lasers can be controlled using the Cairn MultiLine controller with computer and / or front panel digital and analogue modulation, or used with the laser manufacturer or other third-party power supply.

APPLICATIONS

- Spinning disk and other multipoint confocal imaging
- Point-scanning confocal imaging
- Multi-channel TIRF
- FRAP
- Photolysis
- Optogenetics

KEY BENEFITS

- Houses up to six laser modules
- Combination of up to six single-mode and multi mode-fibre outputs
- Flexible combination of wavelengths
- Fast analogue and digital modulation from PC or front panel
- Multiple interlocks and safety shutters
- Fast galvanometer switching option
- Dedicated support for iLAS 2 (Roper Scientific) and X-Light (Crest Optics)
- TriLine (three laser version) also available

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.



MonoLED

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.



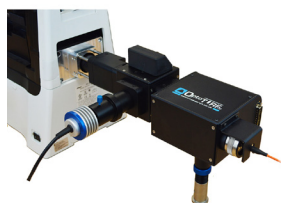
OptoScan

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!



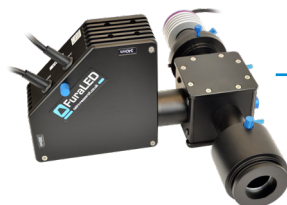
MultiPort Illumination Couplings

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 integrated filters. Fast switching with photodiode feedback stability when used in conjunction with our OptoLED dual channel LED controller. Couples to a variety of upright / inverted microscopes or macroscopes.