

aoLED



The aoLED device integrates a linear and stable led driver with a fiber-coupled LED for optogenetics. The device is a compact and powerful all-in-one optogenetic stimulus system able to generate a high bandwidth (up to 1MHz) and high intensity light signal out of a 200um core fiber with a high NA. The electronic design for high precision analog signal modulation opens the possibility to experiment new light shaping with ramps, sinusoids or modulated signals or fast digital modulations to generate sharp and stable stimuli. The embedded light power sensor enables a precise monitoring of generated signals, tracking stability and eventual derives of the output power over time.

Main features



Outputs to monitor the real current on LED and the actual light power.



Colors for optogenetics applications: Blue (460nm) and Amber (590nm) and many others are available on request.



Plug and play without any parameter setting: 0-5V analog or TTL 5V compatible BNC input



Optimized thermal design for high stability at short and long period.



Very low electromagnetic emissions to minimize noise in experimental activity.

oLEDcontroller

Max LED current	8000mA
Feedback control	Current and Light
Bandwidth	1MHz MAX
INPUT signals	0-5V analog or TTL compatible
Fiber cable OUTPUT	FC connector
Fiber dimension and NA	borosilicate fiber 0.66NA, core 200µm, cladding 230µm
Power supply	12V – 8A max
Wavelengths available	460nm (Blue), 590nm (Amber), many others on request.