

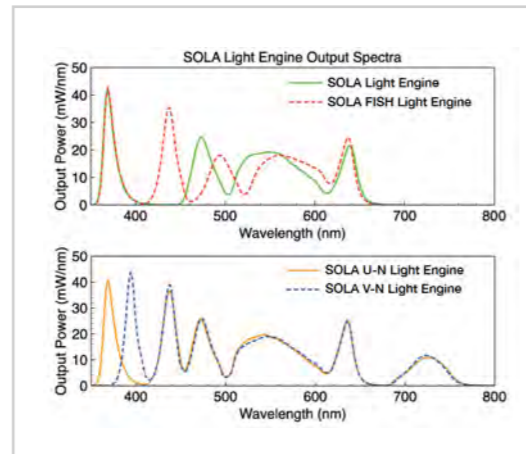
HIGH-POWER WHITE LIGHT LED

For Advanced Epi-fluorescence Microscopy

Multi-LED white light sources deploy 4, 5 or even 6 LEDs for an ultimate bright and spectrally more even white light output (i.e. fewer spectral gaps in the white excitation light). Due to their superior power, they are designed as standalone devices with energy and cooling management, coupled to the microscope via liquid light guides.

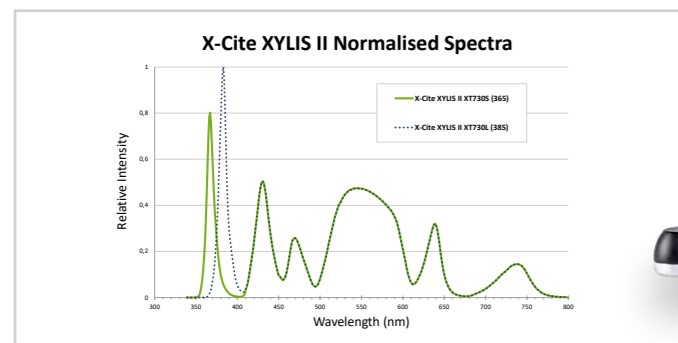


SOLA Light Engine PRODUCT MATRIX		SOLA	SOLA FISH	SOLA V-NIR	SOLA U-NIR
Manual Control		✓	✓	✓	✓
Electronic Control		✓	✓	✓	✓
Number of Sources		4	5	6	6
365 nm Ultraviolet Source		✓	✓	✓	✓
395 nm Violet Source		✓	✓	✓	✓
735 nm near-IR source		✓	✓	✓	✓



LUMENCOR SOLA III

- :: Very bright evenly distributed white light
- :: Feedback controlled constant light output
- :: Manual and electronic control of light output on/off status and electronically controlled linear output intensity adjustment



X-CITE XYLIS II

- :: Powerful 6 LED fluorescence illumination with broad spectral coverage
- :: Patented 'hybrid drive' for brightest light output in the GYR range (500–600 nm)
- :: Improved housing and cooling management
- :: Full control by integration in Zeiss ZEN software

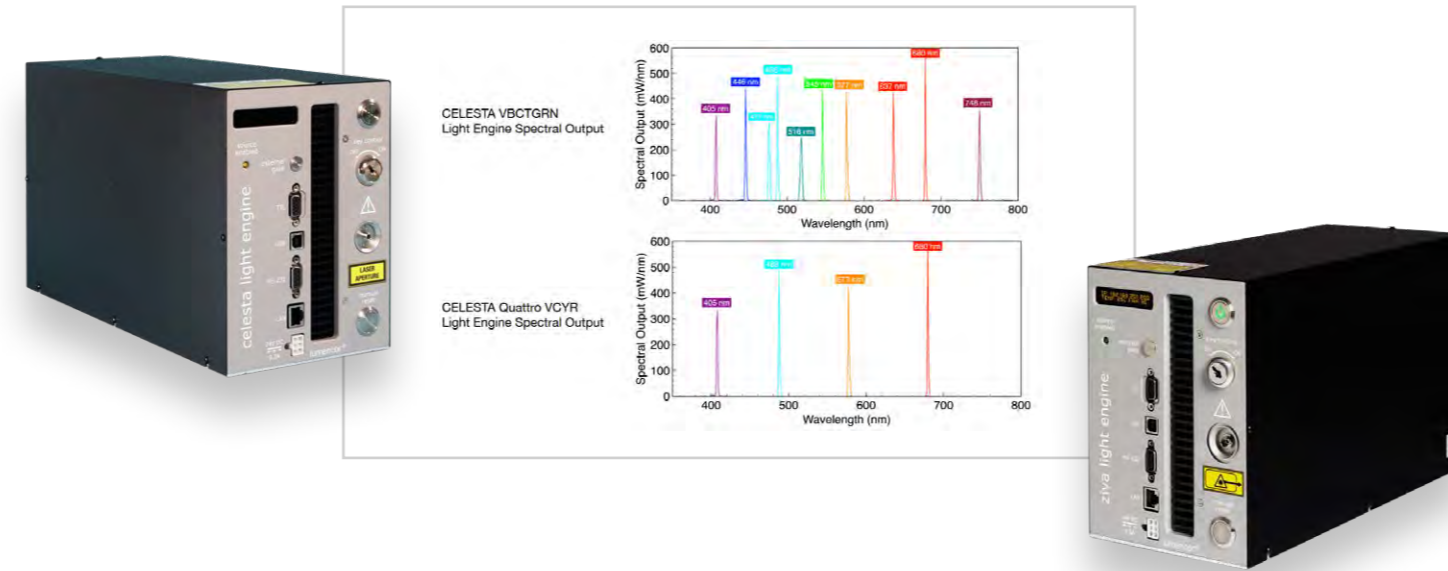
LASER LIGHT SOURCES

Ultimate Light Power for Demanding Applications

Laser light sources are typically being used in applications that require extreme spectral power densities, like spinning disk setups, confocal microscopy, SIM, STORM and other super-resolution or spectroscopic applications.

The Lumencor CELESTA light sources combines 7 independent, solid-state lasers with advanced electronic control to deliver unprecedented optical power and performance. The CELESTA quattro light sources provides the same levels of performance in an economical 4- or 5-laser format.

The Lumencor ZIVA uses special optics to couple its lasers to a way thinner fiber, resulting in an even higher energy density.



METAL-HALIDE LIGHT SOURCES

Metal-halide or shortbow light sources are meanwhile technically outdated and only requested to keep legacy microscope systems with vast old filter sets alive. They are very bright, but lifetime is short (appr. 200–2.000h) and bulb-ageing related intensity loss makes quantification and comparable studies challenging. AHF however, keeps up support for these light sources and provides both new light sources and replacement parts.



LIGHT SOURCES FOR RESEARCH AND INDUSTRY

(B)Right Light Where It Needs to Be



MATCHING LIGHT SOURCES FOR YOUR APPLICATION

Bright fluorescence signals anchor in perfect spectral alignment of the light source, adequate dyes or reporters and a well considered set of optical filters.

Being a truly independent reseller, it is our goal to find the best spectral match for your specific application – your success is our motivation.

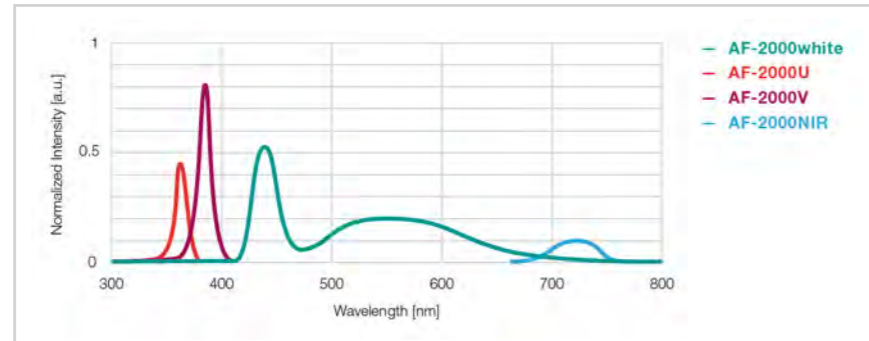
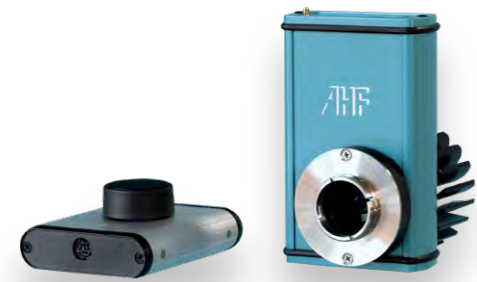
ADVANTAGES OF NEW GENERATION LIGHT SOURCES

- ✓ Extreme bright and stable light output
- ✓ Eco-friendly and safe (power-efficient, very long lifetime, mercury-free)
- ✓ Fast (TTL-) switching
- ✓ No heat-up times or shutters needed

BASIC WHITE LIGHT LED

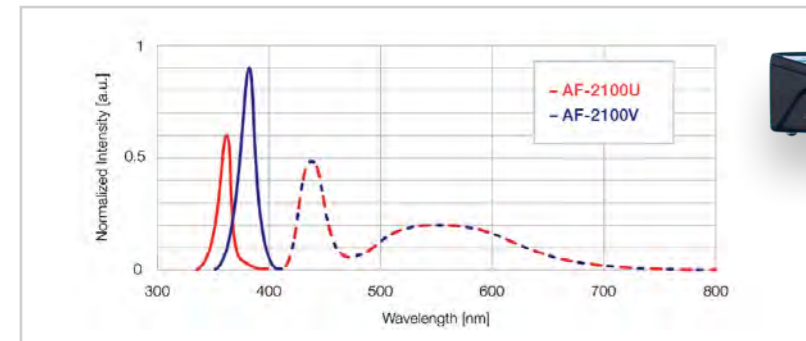
For Standard Fluorescence Applications

For standard fluorescence microscopy applications we recommend our *AF-2000* and *AF-2100* as low-price entry-level light sources and the *pE-300 ultra* as a intermediate solution to switchable color light sources.



AF-2000 SERIES

- :: Mono LED
- :: Direct microscope mount
- :: Passive cooling and electrically shielded housing
- :: Manual Intensity control and TTL trigger option
- :: Lifetime > 25.000 h and low energy consumption



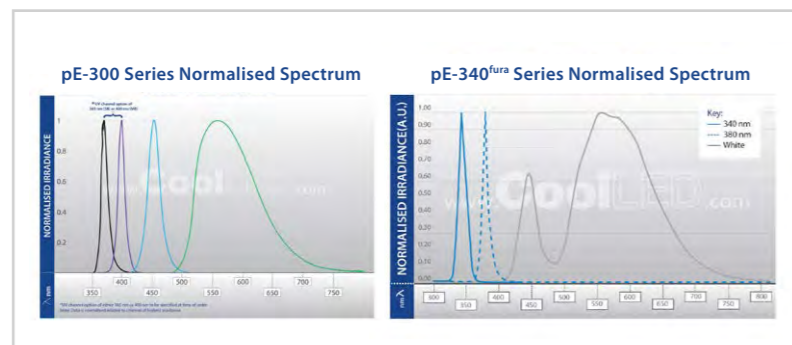
AF-2100 SERIES

- :: Dual LED
- :: Convenient manual intensity control
- :: Passive cooling and solid electrically shielded housing
- :: Direct mount for most microscopes
- :: Optimized for FISH and screening labs



COOLED PE-300 / 340 SERIES

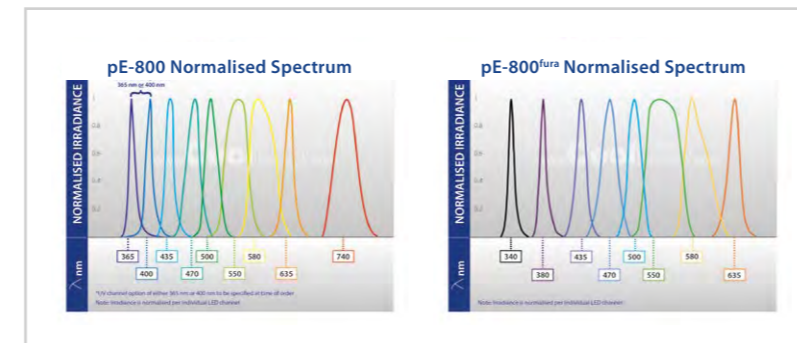
- :: Triple LED
 - :: Independent channel control (*white*) and addtl. bandpass filter holder (*ultra*)
 - :: Direct-mount or LLG-coupled
- Versions: *pE-300 lite / white / ultra / pE-340 fura*



SWITCHABLE COLOR LED

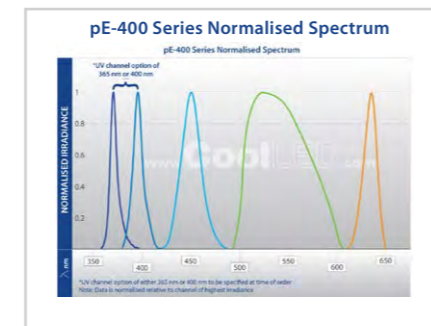
Fast Multiband Applications and Ratiometric Screens

Multi-Color LED light sources truly boost the readout speed in multiband fluorescence applications, as excitation colors can be switched within microseconds – unthinkable in classical filterwheel configurations. With optional bandpass filter mounts directly in the light source, the need for multiband exciters in the cube is eliminated, hence greatest possible spectral flexibility is given.



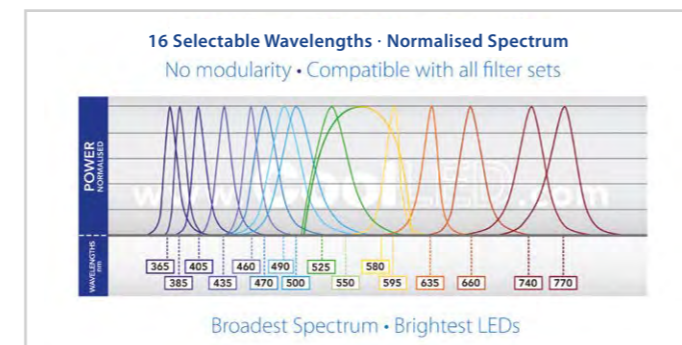
COOLED PE-800 SERIES

- :: 8 independently controllable LED channels
 - :: Broad spectrum from 340 – 740 nm, covering Fura2 – Cy7
 - :: Removable inline excitation filter holders
- Versions: *pE-800* with 365 or 395 nm and *pE-800 fura*



COOLED PE-400 SERIES

- :: 4 powerful LEDs cover DAPI though YFP to Cy5
- :: Individual channel triggering (TTL, <10 μs) and selection
- :: *pE-400max* with bandpass filter holders

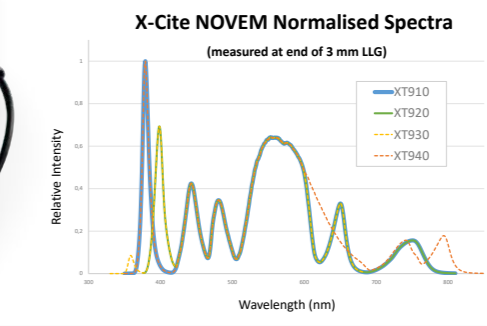


COOLED PE-4000

- :: Broad LED spectrum with 16 LEDs (365 – 770 nm) as 4 x 4 LED array for optimal multiband utilization
- :: Individual control of selected LED (intensity & TTL)
- :: Removable inline excitation filter holders

SWITCHABLE COLOR LED

Ideal for Multiband Applications and Ratiometric Experiments

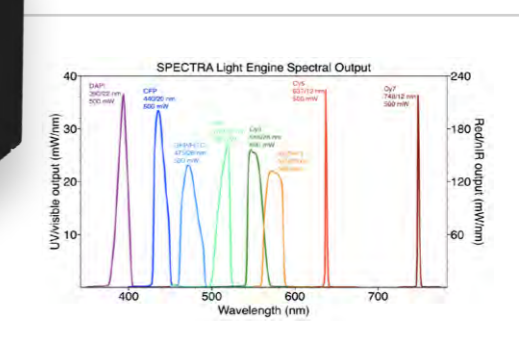
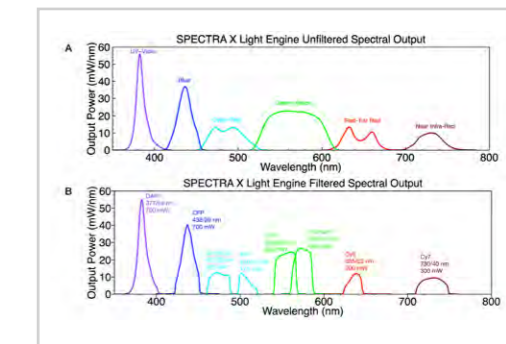


X-CITE NOVEM

- :: Spectral coverage from 340 – 800 nm with 9 LEDs
- :: Filter wheel combined with the patented hybrid drive for most precise and bright excitation of GYR dyes
- :: Extreme bright light output

LUMENCOR SPECTRA X

- :: Spectral coverage from 380 nm – 680 nm with 6 LEDs
- :: 6 filter positions for precise excitation band control
- :: Stable, feedback-loop controlled bright light output



LUMENCOR SPECTRA III

- :: Spectral coverage from 340 nm (on request) – 745 nm
- :: Available with 8 LEDs or 6 LEDs + 2 laser hybrid concept
- :: Precisely defined excitation light with built in bandpass filters

OMICRON LEDHUB

- :: Modular LED light source (customize with 6 out of 19 available high-power LEDs between 340 and 950 nm)
- :: Very fast switching times
- :: Very solid built rackmount design

