Phoseon®

KeyLight™ OEM Light Source



- Small form factor for easy integration
- Enables high performance imaging
- Cost and energy savings
- Architecture supports various optical outputs as well as control devices
- Customizable to meet your application requirements
- Low maintenance and long life
- Software support



KeyLight™ OEM Light Source

Phoseon® KeyLight™ illumination sources for fluorescence microscopy deliver high performance imaging with easy integration for OEMs. Phoseon's proprietary LED solutions offer intense, broadspectrum UV and visible wavelengths for a wide variety of colors from UV through visible into the infrared.

These compact light sources support 4 through 7 channel systems for greater flexibility depending on the application requirements. Phoseon's KeyLight is ideal for molecular or cell biology labs and OEMs who are looking for an affordable, energy-saving, customizable, high-quality, and low maintenance option that allows easy integration.

Upgrade your system now!

Phoseon developed KeyLight OEM light source for microscopy and fluorescent microscopy instruments to ensure reliable and accurate results for labs.

KeyLight products use proprietary and patented LED technology to provide users with a powerful solution that offers a precise and predictable UV output. LEDs are inherently low-noise, stable, cool and controllable. Phoseon takes its years of LED experience and over 300 technology patents to provide users with exceptional imaging products that can advance the life science innovation landscape.



KeyLight™ OEM Light Source

Small Form Factor

Bench space is precious and the biotechnology industry is running the race for powerful yet compact equipment. KeyLight offers a small form factor that can place your lab at an advantage without sacrificing on performance.

Optimized for various system requirements

KeyLight has been designed to be flexible and accessible for different field applications. With its ability to support 4, 5, 6, and 7 channel systems; it can accommodate a wide variety of needs. Customization of features makes KeyLight a better choice for OEM integration.

Technical Specifications

KeyLight	KL400	KL500	KL600	KL700
Light Sources	4 all-on solid state light sources, white light	5 switchable solid state light sources	6 switchable solid state light sources	7 switchable solid state light sources
Available Wavelengths (nm)	377, 425, 450, 475, 520, 545, 555, 560, 630, 730, 740 and others on request			
Dyes / Technique Supported	DAPI, POPO, Aqua, FISH, Eosin, CY3, Texas Red, CY5, and many more			
Light Output	Close Coupled to a standard Olympus Microscope	Built-in output adapter for 3mm diameter Liquid Light Guide (LLG)	1.5 mm core Fiber with SMA connection & 3 mm LLG	
Light Delivery	Close coupled to microscope with focus slide	LLG output connects to microscope	Fiber or Liquid light guide output connects to microscope	
Electronic Control	Light output on/off and graduated intensity control via USB-connected computer			
	Phoseon remote with ON/OFF and Intensity control of white light only			
	Phoseon Intensity control of white light only on body			
Power Requirements	External Power Supply 12 Vdc 8.5A			
Dimensions (LxWxH, mm)	77 x 125 x 160 (Excluding adapter and connectors)	160 x 140 x 160	~220 x 200 x 140	
Sound Level	< 60 dBA @ 1m			
Weight (lbs)	3.75	< 11.02	<15	
Warranty	12 Months			
Ambient operating temperature range	15°C to 30°C			
Relative humidity	< 80% (non-condensing)			
Operating altitude	< 3,000M (9,850 ft)			
Certifications	RoHS, REACH, CE			

Available Wavelengths

Phoseon's proprietary LED solutions offer intense, broad-spectrum UV and visible wavelengths. Each model can be customized to specific wavelength ranges to allow for dye compatibility. Our light sources can be configured to support (not limited to - most dyes can be supported):

- FITC
- **TRITC**
- Cyanines
- Most Alexa dyes
- DAPI
- Hoechst
- BFP
- **CFP**

Contact us as our systems can be configured to most dyes.

Availability of IR sources

The demand for infrared light is increasing in the field and needed for the majority of research in the biomedical sciences. KeyLight provides high quality infrared LEDs that allow scientists to easily detect and see complex experimental data.

Semiconductor Light Matrix (SLM)™ Technology

Phoseon's patented Semiconductor Light Matrix (SLM) technology encapsulates LEDs, arrays, optics and cooling to maximize performance. These components are engineered into high intensity solid state light engines that enable significant process improvements for fluorescence microscopy.



About Excelitas Technologies

Excelitas is the leading provider of advanced, life-enriching technologies that make a difference, serving global market leaders in the life sciences, advanced industrial, nextgeneration semiconductor, aerospace and defense end markets. Headquartered in Pittsburgh, PA, USA, Excelitas is an essential partner in the design, development and manufacture of photonic technologies, offering leading-edge innovation in sensing, detection, imaging, optics and specialty illumination for customers worldwide.