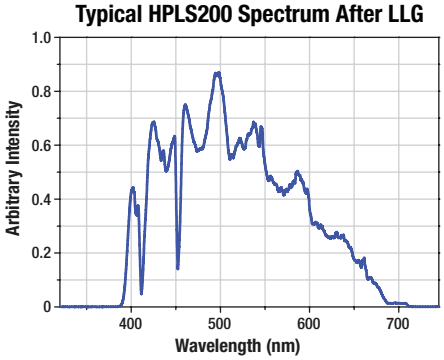
For current pricing, please see our website.

High-Power White Light Sources

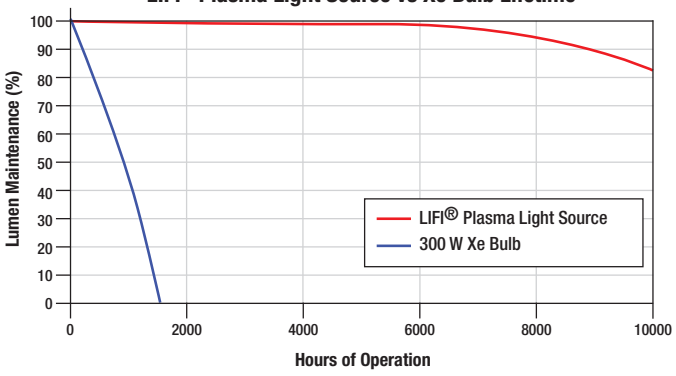
NEW products

Thorlabs' High-Power Light Sources are solid-state, plasma light sources (LIFI®) that combine the best features of solid-state electronics and full-spectrum plasma emitters. These sources incorporate a dielectric resonant cavity to efficiently couple power from a solid-state power amplifier into a high-intensity discharge vessel, resulting in a light source with a long lifetime and a complete color spectrum. They are ideal for applications such as endoscopy, fluorescence microscopy, reflectance microscopy, and other medical lighting and inspection applications.

Typical HPLS200 Spectrum After LLG



LIFI® Plasma Light Source vs Xe Bulb Lifetime



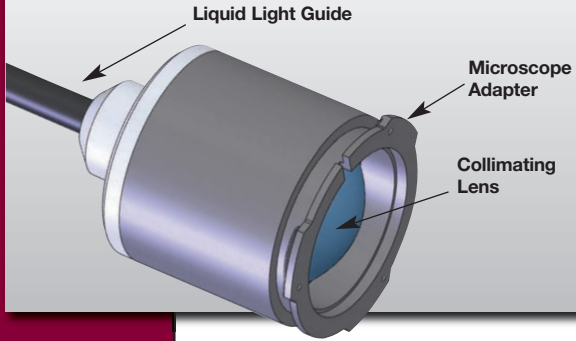
The lifetime of the LIFI® Plasma Light Sources exceeds many Xenon and Mercury vapor arc lamp light sources, as illustrated in the plot above.

The output port of a HPLS200 Series Light Source features a Liquid Light Guide (LLG) mount that accepts Thorlabs' Ø3 mm or Ø5 mm LLGs. The HPLS200 series design enables airflow and monitoring of the LLG tip temperature, which prevents overheating. To further protect the LLG, a hot mirror is placed just before the LLG tip.

The HPLS200's high-intensity output can be mated to the illumination port of many popular microscopes using a collimation adapter. Please contact us for details on these microscope adapters.

Each light source is packaged in a compact housing that incorporates both the power supply and lamp assembly. A three-digit display, controls, and power switch are located on the front of the unit. The lamp can be enabled, and its intensity can be adjusted using the front panel. Alternatively, the lamp can be controlled via computer software using a USB connection. The rear of the unit features a connections for a USB cable, an AC power cable, and a liquid light guide.

Adapters are available…



The HPLS200 Series of light sources can be integrated with popular microscopes.

Please contact us for details

ITEM #	HPLS243	HPLS245
Spectral Range	350 to 700 nm	
Color Rendering Index*	94	
Numerical Aperture (NA)	0.66	
Lifetime	>80% Power After 10,000 Hours	
Dimming Range	30 – 100%	
Electrical		
AC Line Voltage	85 VAC to 264 VAC	
Power Consumption	310 W	
Optical Power @ LLG Tip	2.5 W	6.0 W

*Prior to LLG

ITEM #	$	£	€	RMB	DESCRIPTION
HPLS243	$ 3,800.00	£ 2,736.00	€ 3.306,00	¥ 30,286.00	Solid State Plasma Light Source (Ø3 mm, 1.2 m Long LLG Included)
HPLS245	$ 3,900.00	£ 2,808.00	€ 3.393,00	¥ 31,083.00	Solid State Plasma Light Source (Ø5 mm, 1.2 m Long LLG Included)