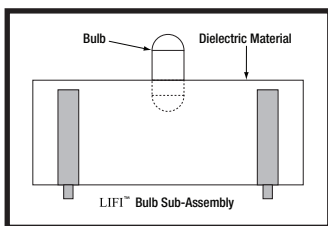


High-Power Solid State Light Sources

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. The HPLS series uses a dielectric resonant cavity to efficiently couple power from a solid-state power amplifier into a high-intensity discharge vessel unlike other electrodeless sources.

The results are a long life (>10,000 hours*), high energy efficiency, and a complete color spectrum, making this source ideal for applications such as endoscopy, microscopy, and other medical lighting and inspection applications. This unit also offers many additional features including a USB 2.0 control interface and instantaneous intensity dimming.

At the heart of LIFI[®] is the bulb sub-assembly where a sealed bulb is embedded in a dielectric material. This design is more reliable than conventional light sources that insert degradable electrodes into the bulb. The dielectric material serves two purposes: first as a waveguide for the RF energy transmitted by the RF Power Amplifier Circuit (PA) and second as an electric field concentrator that focuses energy in the bulb. The energy from the electric field rapidly heats the material in the bulb to a plasma state that emits light of high intensity and full spectrum.



HPLS-30-04

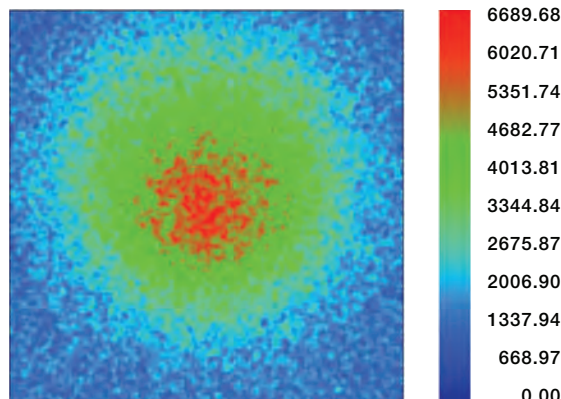
Features

- 350-700 nm Wavelength Range
- 10,000 hr Typical Lifetime*
- Ultra Low Flicker
- Dimming Control, 20-100 %

* Lumen maintenance typical operating condition is defined as mean time to 50% of original output.

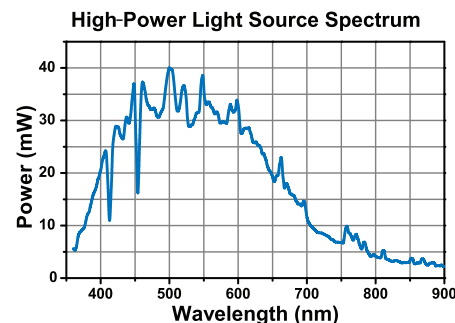
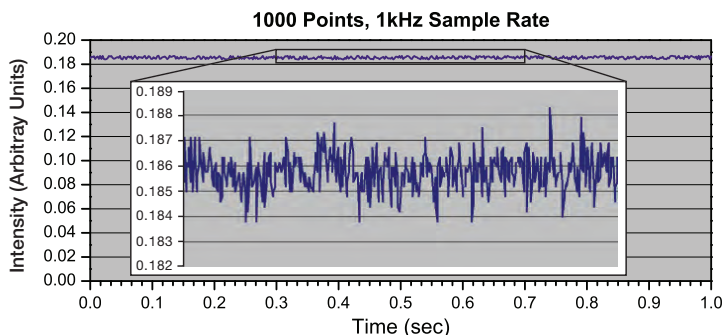
ITEM#	HPLS-30-02	HPLS-30-03	HPLS-30-04
Spectral Range	350 to 700 nm		
Color Rendering Index (CRI)	94		
Luminous Flux	2260 lm	1950 lm	2800 lm
Numerical Aperture (NA)	0.66	0.5	0.5
Rated Average Lifetime	10,000 Hours		
Dimming Range	20% to 100%		
Electrical			
AC Line Voltage	85 VAC to 264 VAC		
DC Input Voltage	28 VDC (Rated at 8.5 A)		
Nominal Power Use	230 W		

Wavelength Range	Power Collected (Ø5 mm Aperture)		
	HPLS-30-02	HPLS-30-03	HPLS-30-04
UV (200-400 nm)	1.0 W	0.9 W	1.3 W
VIS (400-750 nm)	8.2 W	7.1 W	10.2 W
NIR (750-1400 nm)	2.0 W	1.7 W	2.5 W
SWIR (1400-3000 nm)	0.5 W	0.4 W	0.6 W



Detector Image: Luminance in Position Space

Detector 6, NSCG Surface 1: Rect Near Field
Size: 5.000 W x 5.000 H mm, Pixels 181 W x 181 H, Total Hits = 289,841



ITEM#	\$	£	€	RMB	DESCRIPTION
HPLS-30-02	\$ 1,950.00	£ 1,352.00	€ 1,731.00	¥ 16,466.00	Light Source, Focused, NA 0.50, Lumens 2260, UV Screened Spectrum*
HPLS-30-03	\$ 1,950.00	£ 1,352.00	€ 1,731.00	¥ 16,466.00	Light Source, Focused, NA 0.50, Lumens 1950
HPLS-30-04	\$ 1,950.00	£ 1,352.00	€ 1,731.00	¥ 16,466.00	Light Source, Focused, NA 0.66, Lumens 2800

* UV screened at 315 - 400 nm