
THORLABS

**SLS201, SLS201/M
Stabilized Tungsten Halogen
Light Source**

User Guide



















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Part 1 Warning Symbol Definitions

Below is a list of warning symbols you may encounter in this manual or on your device.

Symbol	Description
	Direct Current
	Alternating Current
	Both Direct and Alternating Current
	Earth Ground Terminal
	Protective Conductor Terminal
	Frame or Chassis Terminal
	Equipotentiality
	On (Supply)
	Off (Supply)
	In Position of a Bi-Stable Push Control
	Out Position of a Bi-Stable Push Control
	Caution: Risk of Electric Shock
	Caution: Hot Surface
	Caution: Risk of Danger
	Warning: Laser Radiation
	Caution: Spinning Blades May Cause Harm

Part 2 Description



HOT SURFACE



The equipped fan will not be enabled until the surface temperature goes up to 65 °C.

2.1. Product Overview

This tungsten halogen light source is equipped with an internal feedback loop and therefore can ensure a constant intensity, low noise and long life span. The principle of operation is depicted in the block diagram as below.

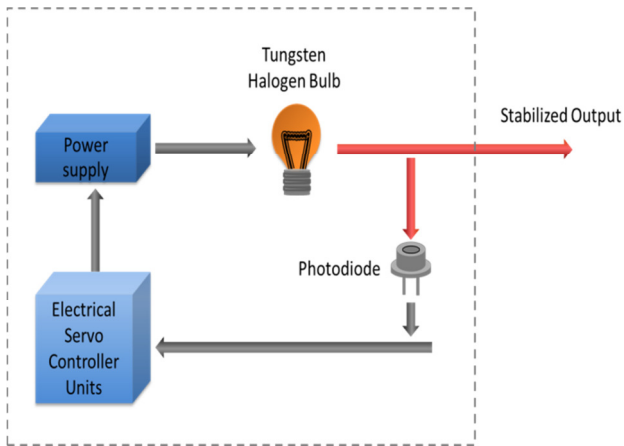


Figure 1 SLS201 Block Diagram

2.2. Setup

The SLS201 features a red anodized filter holder, which can accommodate Ø1" optics up to 0.31" (8.0 mm) thick and is equipped with four tapped holes and compatible with the cage system. It is also compatible with Thorlabs' CFH2-F filter holder.

It has two slots on both sides for a better mounting on the optical table as well as two tapped holes on the bottom for mounting to the post.

Screw size: 1/4"-20 for SLS201

M6 for SLS201/M

2.3. Power Supply

The SLS201 operates with 12 V DC power. We recommend using the AC/DC power supply that is included with the SLS201 case for best performance.

2.4. Ventilation

The SLS201 is equipped with a fan which is controlled by an electrical servo circuit that has a feedback from the internal temperature sensor. Please note that the fan would not be enabled until the temperature of housing goes beyond 65 degC, so don't worry when you power on the SLS201 and find that the fan doesn't work.

2.5. Spectral Power Density

The SLS201 Stabilized Tungsten Halogen Light Source is ideal for the VIS-NIR (300 nm-2600 nm) application. Its spectral power density is depicted as below.

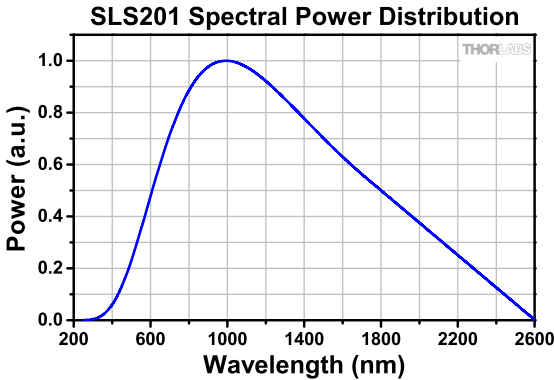


Figure 2 Spectral Power Density

2.6. Optical Path Configuration

The optical path configuration of this tungsten halogen light source consists of a tungsten halogen bulb, a uncoated N-BK7 best form lens (LBF254-040) and a uncoated aspheric condenser Lens (ACL2520).

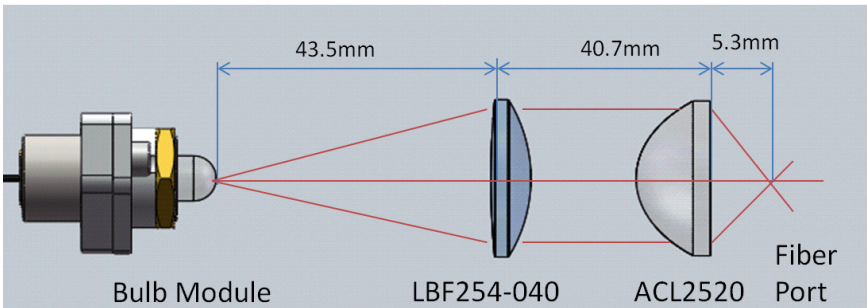


Figure 3 SLS201 Optical Path

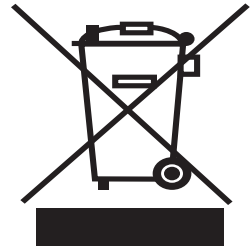
Part 3 Specifications

Specification	Value
Center Wavelength	1000 nm
Min Full Output Power	>10 mW
Fiber interface	SMA
Light Power Stability	0.05%
Drift per Hour	0.01%
Color Temperature Stability	+/-15K
Dimension	55 x 57.5 x 194.1 mm
Bulb Power	9 W
Coupled Power	10 mW / 400 μ m fiber
Lifespan	10,000 hours
Compatible Filter Size	\varnothing 1" Diameter, Up to 0.31" (8.0 mm) thick

Part 4 Regulatory

As required by the WEEE (Waste Electrical and Electronic Equipment Directive) of the European Community and the corresponding national laws, Thorlabs offers all end users in the EC the possibility to return "end of life" units without incurring disposal charges.

- This offer is valid for Thorlabs electrical and electronic equipment:
- Sold after August 13, 2005
- Marked correspondingly with the crossed out "wheelie bin" logo (see right)
- Sold to a company or institute within the EC
- Currently owned by a company or institute within the EC
- Still complete, not disassembled and not contaminated



Wheelie Bin Logo

As the WEEE directive applies to self contained operational electrical and electronic products, this end of life take back service does not refer to other Thorlabs products, such as:

- Pure OEM products, that means assemblies to be built into a unit by the user (e.g. OEM laser driver cards)
- Components
- Mechanics and optics
- Left over parts of units disassembled by the user (PCB's, housings etc.).

If you wish to return a Thorlabs unit for waste recovery, please contact Thorlabs or your nearest dealer for further information.

4.1. Waste Treatment is Your Own Responsibility

If you do not return an “end of life” unit to Thorlabs, you must hand it to a company specialized in waste recovery. Do not dispose of the unit in a litter bin or at a public waste disposal site.

4.2. Ecological Background

It is well known that WEEE pollutes the environment by releasing toxic products during decomposition. The aim of the European RoHS directive is to reduce the content of toxic substances in electronic products in the future.

The intent of the WEEE directive is to enforce the recycling of WEEE. A controlled recycling of end of life products will thereby avoid negative impacts on the environment.

Part 5 Thorlabs Worldwide Contacts

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