



Lambda LS

Stand-Alone Xenon Arc Lamp and Power Supply

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The Lambda LS is a stand-alone illuminator consisting of a xenon-arc lamp, lamp housing, cold mirror and power supply in a single enclosure. The Lambda LS is designed to be used with a liquid light guide which transmits remarkably flat, intense, illumination to the optical train of the user's microscope or other instrumentation. The lamp's cabinet accommodates a standard Sutter Instrument filter wheel that slides easily in and out of a slot in the light path. If desired, a second filterwheel can be mounted on the outside of the cabinet. When used with appropriate adapters, the light guide output is compatible with most common microscope systems.

Unlike the arc lamps used with most fluorescence microscopes, the 175W xenon bulb is pre-aligned using a parabolic mirror and does not require alignment, focusing or collimation. In the standard configuration, the Lambda LS bulb is capable of producing light output from 330nm to a cutoff of 650 nm determined by the cold mirror. An optional enhanced UV bulb produces output much lower into the UV (cut off near 200 nm). As with any UV generating light source, the optional bulb generates significant quantities of ozone and must be used in an adequately ventilated environment.

The Lambda LS utilizes a compact design, which places power supply, lamp house, arc lamp and cold mirror in a single enclosure. This system eliminates a common failure associated with standard arc lamp designs; when using a remote power supply aging may lead to a decreased ability to light the lamp due to loss of the insulating characteristics of the lengthy high-tension line. As with all our equipment, the power supply has been designed to minimize electrical noise that can be picked up by physiological recording equipment.

The liquid light guide can be coupled to the illumination port of most microscopes using an adapter which can be purchased separately. Please refer to the [Microscope Adapters](#) section for further information. Extended output ranges are possible with various cold mirror and light guide combinations. Phone Sutter to discuss your specific application requirements.

FEATURES

- Xenon lamps provide light levels which exceed those of standard microscope fluorescence lamps
- Equipped with a cold mirror to eliminate IR heating of down stream optical components
- Compact stand-alone lamp housing/power supply enclosure
- Pre-aligned bulb eliminates common focusing problems
- Integrated hour meter for convenient monitoring of lamp life
- Modular construction allows use of optional liquid light guide for flexible direction of light output
- Easily accommodates Sutter Instrument filter wheels and *SmartShutter*® within the body of the lamp
- Can be coupled via a liquid light guide to many standard microscopes - Nikon, Zeiss, Leica and Olympus

Microscope coupling requires special adapters that are not included; please see the [microscope adapter](#) section in this catalog

TECHNICAL SPECIFICATIONS

Output Range

330 nm to 650 nm - ozone free

200 nm to 650 nm - full spectrum (NOTE: full spectrum produces ozone)

Lamp Type

175 or 300 Watt xenon (pre-aligned to produce collimated output)

Radiant Output

2.5 Watts (175W lamp)

4.5 Watts (300W lamp) (broadband, full beam)

Lamp Life

1000 hours (Bulb warranted for 500 hours. Longer life depends on application)

Expected life is 1000 hours.)

Power Consumption

175 Watts or 300 Watts

Dimensions

10.5 in x 9.5 in x 10 in | 26.7 cm x 24.1 cm x 25.4 cm

Weight

10.5 lbs | 4.8 kg

Electrical

120/240 Volts

50/60 Hertz power line

RoHS Compliant

[Lambda LS CE Certificate](#)



US Prices > Lambda LS

International prices vary by country. Please contact your local distributor or Sutter Instrument for a quotation. Prices subject to change without notice.

All Lambda LS systems include: xenon lamp, cold mirror, power supply and lamp housing, support base with mounting rods, drop-in filter holder and manual

Catalog Number	Description	Price
LS-OF30	Lambda LS with 300 Watt ozone free lamp	\$ 5,550
LS-FS30*	Lambda LS with 300 Watt full spectrum lamp	\$ 5,550
LS-OF17	Lambda LS with 175 Watt ozone free lamp	\$ 5,300
LS-FS17*	Lambda LS with 175 Watt full spectrum lamp	\$ 5,300
LS-OF30R¹	Lambda LS with 300 Watt ozone free lamp and cold mirror that reflects to 780 nm	\$ 5,600
LS-OF30IR²	Lambda LS with 300 Watt ozone free lamp and cold mirror that reflects to 1100 nm	\$ 5,600
LS-FS30UV³	Lambda LS with 300 Watt full spectrum lamp and cold mirror that reflects to 275 nm	\$ 5,600

* *Full spectrum bulbs produce ozone. Please be certain that you have proper ventilation. Contact Sutter for details.*

US Prices > FILTER WHEELS AND SHUTTER

Please consult [Lambda 10-3](#), [10-B](#), and [SmartShutter](#) pages for controller options or phone Sutter for assistance.

Catalog Number	Description	Price
LB10-NWIQ/LS	10 position 25 mm filter wheel with <i>SmartShutter</i> ® for mounting in Lambda LS	\$ 3,940
LB10-NW *	10 position 25 mm filter wheel (can be mounted inside Lambda LS or outside if used as a second wheel)	\$ 3,110
IQ-25/LS	25 mm <i>SmartShutter</i> ® for mounting in Lambda LS	\$ 1,775

* *Will need to purchase additional controller if using as a second wheel*

US Prices > ACCESSORIES

Catalog Number	Description	Price
LLG	Liquid light guide (2 meters, 3 mm dia.), C-mount, lens and lens tube	\$ 1,485
LLG/380⁴	Liquid light guide (2 meters, 3 mm dia.), C-mount, lens and lens tube	\$ 1,485
LLG/2000⁵	Liquid light guide (2 meters, 3 mm dia.), C-mount, lens and lens tube	\$ 1,485
LLG/250⁶	Liquid light guide (2 meters, 3 mm dia.), C-mount, lens and lens tube	\$ 1,485
LLGPLUS⁷	Liquid light guide (2 meters, 3 mm dia.), Heatsink, C-mount, lens and lens tube	\$ 1,695
LLGPLUS/380⁷	Liquid light guide (2 meters, 3 mm dia.), Heatsink, C-mount, lens and lens tube	\$ 1,695

LLGPLUS/2000 ⁷	Liquid light guide (2 meters, 3 mm dia.), Heatsink, C-mount, lens and lens tube	\$ 1,695
DROP-IN	Drop-in filter holder (25 mm diameter)	\$ 82
O777655 ⁸	Replacement 3 mm light guide (300 series)	\$ 650
O777651 ⁹	Replacement 3 mm light guide (380 series)	\$ 650

¹ Order with LLG/380

² Order with LLG/380 or LLG/2000

³ Order with LLG/250

⁴ Supports transmission into near IR

⁵ Supports transmission into IR. No output below 420nm

⁶ Supports transmission into UV

⁷ Extends the lifetime of the LLG when the Lambda LS is used without a SmartShutter

⁸ Maximum UV transmission

⁹ Allows light input into near IR

US Prices > BULBS*

Catalog Number	Description	Price
O661176	Ozone free 175 Watt xenon bulb (attenuated output below 340 nm)	\$710
O661175 **	Full spectrum 175 Watt xenon bulb	\$710
O661301	Ozone free 300 Watt xenon bulb (attenuated output below 340 nm)	\$710
O661300 **	Full spectrum 300 Watt xenon bulb	\$710
O661115	Housing and heat sink for bulb (bulb will be installed when ordered at the same time as housing)	\$305

*Please note that the above bulbs do not include the outer blue housing. If you need or want an extra housing, please contact Sutter by phone, fax or email.

** Full spectrum bulbs produce ozone. Please be certain that you have proper ventilation. Contact Sutter for details.

Mounting adapters for Nikon, Zeiss, Leica and Olympus microscopes are available. Please see the [Microscope Adapters](#) page or contact Sutter Instrument for pricing and further information.

RELATED PRODUCTS

[Microscope Adapters](#)

[SmartShutter®](#)

[Lambda 10-3](#)

[Lambda 10-B](#)

USER MANUAL

[Lambda LS Operation Manual](#)

PRODUCT INFORMATION

[Download Sales Flyer](#)

Spectral Output

