

150W Xenon Light Source

—GLORIA-X150A

- Spectral range from UV to VIS(200-2500nm)
- Optical axis height is 157-193mm
- Output beam diameter is 46mm
- Supports wide range of accessories
- Fan cooled housing



Xe arc lamp light sources are the preferred artificial sources to simulate sunlight. The high color temperature(6000K) of the Xenon lamps is a close match to the solar temperature. This results in very similar solar spectra in the UV and VIS although the source has some Xe emissions lines in the near IR.

Application for luorescence, Luminescence and Phosphorescence, Absorbance and Reflectance, Photochemistry, Photolithography, Detection of optical Schlieren, Solar simulation.

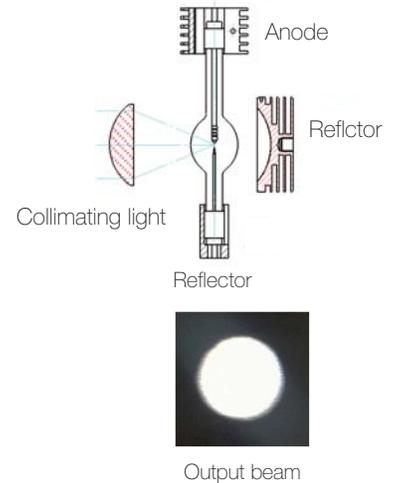
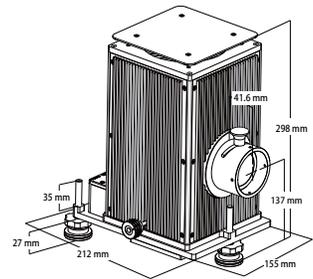
More light

A spherical reflector collects the output from the rear of the lamp and focuses it on or near the arc, for collection by the condenser. The output is increased by as much as 60 %.

Lamp adjustment

The housing has precise external lamp adjusters.

They let you place the arc where you want it. This is important for simplifying fiber and slit illumination. In many applications, this eliminates the need for readjusting any optics located beam path outside the housing.



Arc Lamp Power Supply



Current and light ripple

Direct current generated by rectification always has a current ripple (superimposed on the direct current). Current ripple is the main factor of cathode fissioning and therefore greatly influences lamp luminous flux or radiant power and lamp life.

But for the most (scientific) applications the light ripple is most important. This not only depends on the current ripple, but on the operation conditions typical light ripple of our arc light sources is 0.5%.

Igniters

To ignite an arc lamp it is necessary to ionize the insulation gas between the electrodes. This is done by a high voltage discharge or flash. To get the flash into a stable stationary arc discharge, certain conditions must be met:

A sufficient high ignition voltage from the ignitor n a sufficient high electrical energy in the ignition spark

A sufficient quick start of current flow n An adequate open circuit voltage

The two last conditions must be achieved by the power supply. Some arc lamps require constant current, others constant power for optimal operation. The power supplies must be designed meet the operation conditions.

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Current or power adjust

During operation the tungsten from the electrodes evaporates slowly and deposits on the inside of the lamp envelope. This reduces the radiated output by up to 30% during lamp life. If application requires constant light output, the lamp current must be adjustable within a certain range.

Constant light output

The output intensity of a new lamp continuously decreases during lamp life. To irradiate your targets with constant intensity (during lamp life) you must start a new lamp with 80% of lamp current or power value and then gradually apply higher current. When the rated current value is reached the lamp is statistically used up.

Specification of power supply

Voltage	110/220V AC \pm 10%
Power consumption	<250W
Power	150W
Adjustable current	7-9A
Current ripple	\leq 0.05% (@8.5A)
Line voltage	>20KV
Light output ripple	0.05% (8.50A)

Ordering Information

To build a complete light source you will need:Lamp housing, condensing optics, lamp with appropriate adapter, electrical interface, cable and power supply. As an option we suggest the rear reflector for more output.

Model	Description	Details
GLORIA-X150A	150W Xenon Light Source	150W Xenon Light Spource(GLORIA-X150A) includes housing(LSH-X150A),power supply (LSPX150A) and Lamp (LSB-X150)

Lamp Sheet

Model	Power (W)	Current (A)	Voltage (V)	Approx. flux (lm)	Horizontal intensity (cd)	Approx. luminance (cd/mm ²)	Luminous area (W x H) (mm)	Average life (h)	lamp size (Lx D) mm
LSB-X150	150	8.5	18	3200	320	—	0.8 × 2.0	1000	127 × 20
LSB-X150AOF	150	8.5	17.5	2900	290	200	0.5 × 1.6	2000	127 × 20
LSB-X150AUV	150	7.5	20	3000	300	150	0.5 × 1.7	2000	127 × 20

Note: LSB-X150UV is UV enhanced with spectral range 200-250nm ,please vent the ozone to the outside.