

Short Arc Xenon Lamp Source



Short Arc Xenon Light Source

1. Spectral range from UV to VIS(200-2500nm).

2. Optical axis height is 157-193mm.

3. Output beam diameter is 46mm.

4. Supports wide range of accessories.

5. Fan cooled housing.

Description:

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:

Application for fluorescence, 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 adjust any optics located beam path outside the housing.

Rotary Evaporator

Scraped Film Evaporator /
Short Path (Molecular)
Distillation System

Chemical Glass
Reactor

High Shear Homogen-
eous Emulsification
Reactor

Pilot Ultrasonic
Emulsification Reactor

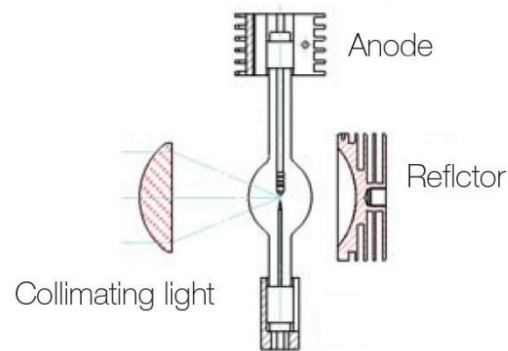
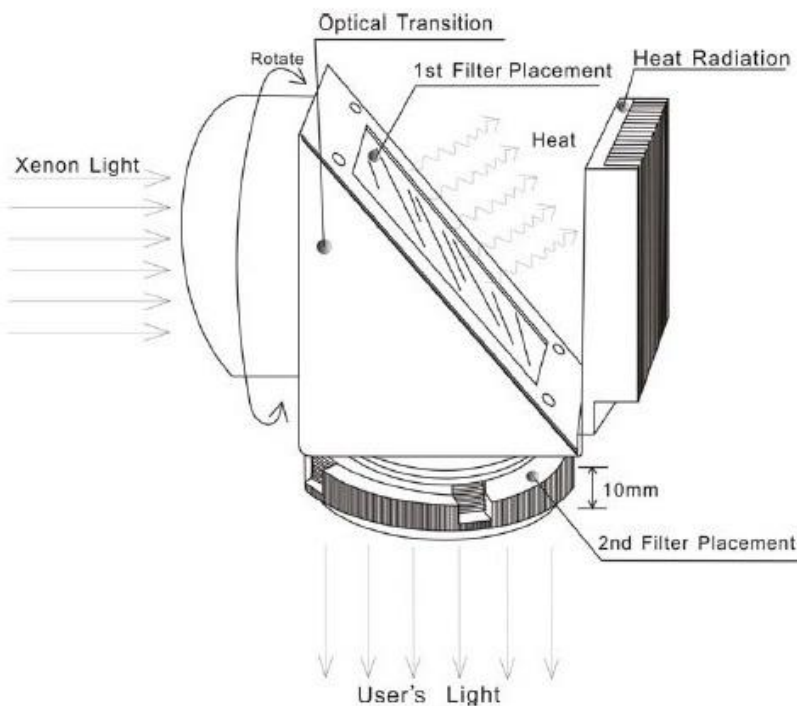
Vacuum Filter / Glass
Liquid Separator

Photochemical
Glass Reactor

Hydrothermal
Synthesis Reactor

High Pressure
Reactor

Lamp Adjustment



Reflector



Output beam

Short Arc Xenon 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%.

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.

Arc Lamp Power Supply



Short Arc Lamp Power Supply

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
TOP-X75	75W Xenon Light Source	75W Xenon Light Source includes housing (TSH-X75), power supply (TSP-X75) and Lamp (TSL-X75), the filter are optional, pls refer the following sheet.
TOP-X100	100W Xenon Light Source	100W Xenon Light Source includes housing (TSH-X100), power supply (TSP-X100) and Lamp (TSL-X100), the filter are optional.
TOP-X150	150W Xenon Light Source	150W Xenon Light Source includes housing (TSH-X150), power supply (TSP-X150) and Lamp (TSL-X150), the filter are optional.
TOP-X180	180W Xenon Light Source	180W Xenon Light Source includes housing (TSH-X180), power supply (TSP-X180) and Lamp (TSL-X180), the filter are optional.
TOP-X250	250W Xenon Light Source	250W Xenon Light Source includes housing (TSH-X250), power supply (TSP-X250) and Lamp (TSL-X250), the filter are optional.
TOP-X300	300W Xenon Light Source	300W Xenon Light Source includes housing (TSH-X300), power supply (TSP-X300) and Lamp (TSL-X300), the filter are optional.
TOP-X450	450W Xenon Light Source	450W Xenon Light Source includes housing (TSH-X450), power supply (TSP-X450) and Lamp (TSL-X450), the filter are optional.
TOP-X500	500W Xenon Light Source	500W Xenon Light Source includes housing (TSH-X500), power supply (TSP-X500) and Lamp (TSL-X500), the filter are optional.
TOP-X550	550W Xenon Light Source	550W Xenon Light Source includes housing (TSH-X550), power supply (TSP-X550) and Lamp (TSL-X550), the filter are optional.
TOP-X700	700W Xenon Light Source	700W Xenon Light Source includes housing (TSH-X700), power supply (TSP-X700) and Lamp (TSL-X700), the filter are optional.
TOP-X900	900W Xenon Light Source	900W Xenon Light Source includes housing (TSH-X900), power supply (TSP-X900) and Lamp (TSL-X900), the filter are optional.
TOP-X1000	1000W Xenon Light Source	1000W Xenon Light Source includes housing (TSH-X1000), power supply (TSP-X1000) and Lamp (TSL-X1000), the filter are optional.
TOP-X1600	1600W Xenon Light Source	1600W Xenon Light Source includes housing (TSH-X1600), power supply (TSP-X1600) and Lamp (TSL-X1600), the filter are optional.
TOP-X2000	2000W Xenon Light Source	2000W Xenon Light Source includes housing (TSH-X2000), power supply (TSP-X2000) and Lamp (TSL-X2000), the filter are optional.

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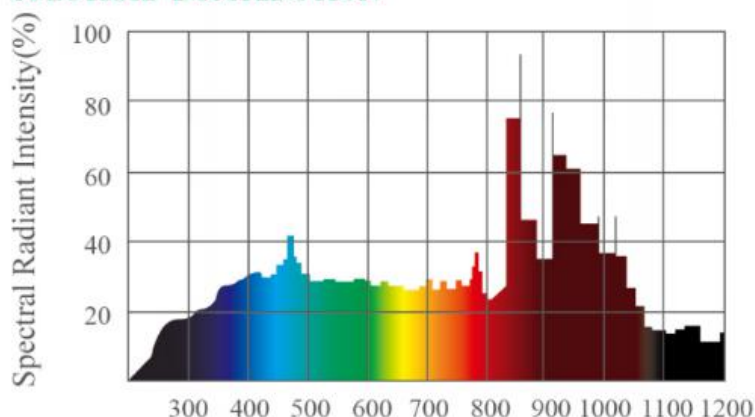
 High Pressure
Reactor

Optical filter

TOPTION optical filter has three types:

1. Catalyst evaluation type optical filter.
2. Sunshine ultraviolet accelerated analog optical filter.
3. UV-CUT optical filter.

SPECTRAL DISTRIBUTION



Catalyst evaluation type optical filter

Peak wavelength	254nm	350nm	365nm	380nm	400nm	420nm	435nm	450nm	475nm	500nm	520nm	550nm
Half-wave bandwidth	15nm	15nm	15nm	15nm	15nm	15nm	15nm	15nm	15nm	15nm	15nm	15nm
Substrate material	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz
Dimension (mm)	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm	∅ 52mm

Model	Sunshine ultraviolet accelerated analog optical filter	UV-CUT optical filter	
	UVREF	UV-CUT400nm	UV-CUT420nm
Filter method	45° transmission-reflect type ultraviolet region	Transmission-reflect type ultraviolet region cut-off ability: 99.9%.	
Dimension (mm)	70*70mm	∅ 52mm	
Plating process	Hafnia epidural. Visible reflect, infrared transmission. 70*70*2mm	Hafnia epidural	
Substrate material	Quartz	Quartz	
Average reflectance	> 85%	\	
Reflecting region (nm)	250nm-400nm	\	
Visible-IR transmissivity	> 90%	\	