Sirius-300P Series Photocatalytic Xenon Light Sources, 300 W, Ø50 mm Beam

Model Sirius-300P Series · waveqvanta.com/products/sirius-300p-series-photocatalytic-xenon-light-sources

300 W xenon light sources with high UV-VIS-NIR output for photocatalysis and photochemistry experiments.



The Sirius-300P series are 300 W xenon light sources for photocatalysis, delivering 50 W of radiant output across the UV, visible and near-infrared. The Sirius-300P (320–2500 nm) is intended for visible-light work, while the Sirius-300PU (200–2500 nm) has high output from 200 to 400 nm for UV applications. Both run in constant optical power mode with instability below 1%.

Key features

- 300 W xenon lamp (adjustable 180–320 W) with 50 W radiant output
- High light collection efficiency for high-power, collimated output in a Ø50 mm beam
- Constant optical power operation with instability < 1%
- Light axis height adjustable from 70 to 220 mm; can be used as one unit or split into two parts
- Timer-controlled cut-off of the light path
- Efficient air cooling to extend bulb life (1000 h lifetime)

Specifications

Lamp Power	300 W (180–320 W)
Operating Voltage	DC 14 V (13–16 V)
Operating Current	DC 21 A (10–22 A)
Radiant Output	50 W
Spectral Range	320–2500 nm (Sirius-300P), 200–2500 nm (Sirius-300PU)
Light Axis Height	70–220 mm, adjustable
Beam Size	Ø50 mm
Output Stability	Instability < 1% (constant optical power mode)
Shutter	Timed light path cut-off
Cooling	Air-cooled
Lamp Lifetime	1000 h
Dimensions	341 × 244 × 290 mm
Weight	11 kg

Model overview

Model	Spectral Range	Radiant Output (W)	UV Output (W)	IR Output above 770 nm (W)
Sirius-300P	320–2500 nm	50	2.6	28.8
Sirius-300PU	200–2500 nm	50	6.6	26.8

Typical applications

- Visible-light photocatalysis (Sirius-300P)
- UV photocatalysis and photochemistry, 200–400 nm (Sirius-300PU)
- Photochemical reaction studies
- Broadband UV-VIS-NIR irradiation of samples