

Gloria-LDLS-A

Laser-Driven Broadband Plasma Source

A compact xenon-plasma source sustained by a continuous laser, providing a small emitting region and broad UV-to-NIR output. Free-space collection allows the source to be configured for spectroscopy and optical characterisation.

1. Continuous laser pump

2. Laser-sustained xenon plasma

3. Broadband free-space output

Best suited to

Measurements requiring high spectral radiance from a small broadband emitting region.

Configuration

Specify the collection numerical aperture, optical throughput and spectral interval. Deep-UV operation requires nitrogen purging of the source path.

Specifications

Published parameters	
Spectral range	170–2100 nm
Spectral radiance at 400 nm	40 mW/(mm ² ·sr·nm)
Numerical aperture	0.47
Power stability	<0.3% RMS over 30 s
Typical bulb life	10,000 h
Emitting region	97 × 194 µm
Source head	82 × 86 × 76 mm
Power supply	113 × 111 × 209 mm

Measurement features

- Laser-sustained plasma avoids electrodes in the sustained discharge.
- Free-space output for application-specific collection optics.
- Natural cooling without external auxiliary cooling.

Configuration note

Spectral radiance describes brightness per area, solid angle and wavelength interval; it is not total optical output power. The illustration shows the optical principle.

Full configuration: www.precisometer.com/spectroscopy/light-sources/dls