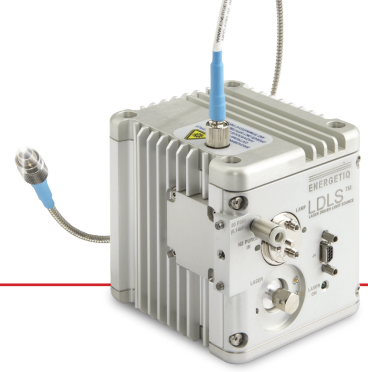


EQ-99X-FC LDLS™

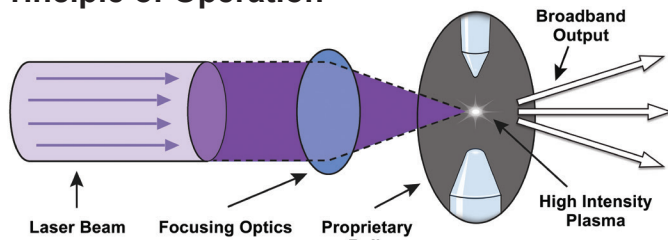
Laser-Driven Light Source



Overview

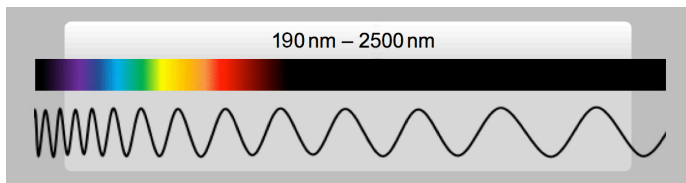
Energetiq's EQ-99X-FC LDLS is a high brightness fiber-coupled source with a broad wavelength range from UV to Visible and into the NIR region. The unique principle of operation provides extremely bright, spatially and spectrally stable broadband radiation from 190 nm – 2500 nm with a lifetime greater than 10,000 hours.

Principle of Operation



LDLS technology utilizes a laser to create an extremely small, high brightness plasma with a broad spectral range.

Wavelength Range



Properties

Wavelength Range	190 nm – 2500 nm
Plasma Size (FWHM) ¹	100 μm X 180 μm
Numerical Aperture (Output Fiber)	0.22 NA
Bulb Lifetime	10,000 hours
Laser Class	Class 1 (IEC 60825-1: 2014)

¹Average

Typical Performance

Broadband Optical Power ²	~95 mW
--------------------------------------	--------

² Measured with thermopile; *UVFIBERX-230 fiber optic cable

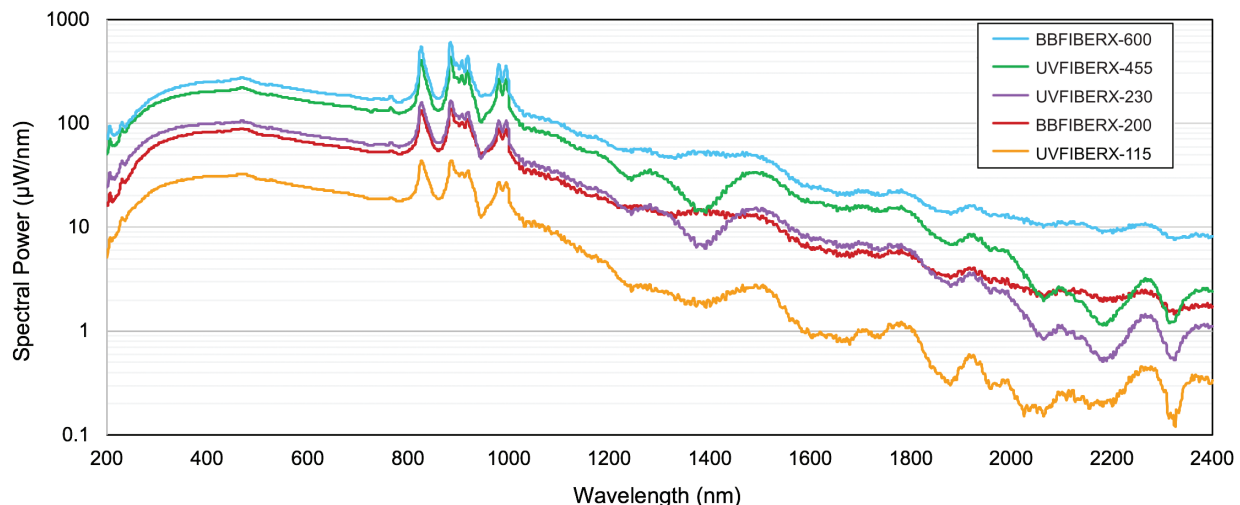
Models

LDLS are sold as systems. Each EQ-99X-FC system includes a lamp head, controller, remote control, and necessary power cables. Please note: Fiber optic cable assembly must be purchased separately.

Part Number	Description	Wavelength Range
EQ-99X-FC-S	EQ-99X with Fiber Coupled Output	190 nm – 2500 nm

Spectral Power Comparison

Average flux, measured with 1 meter long fiber. For reference only.



Consumable Components

The recommended service interval is 10,000 hours.

Part Number	Description
EQ-99X-FC-BKIT-R	Bulb Replacement Kit (Not Field Replaceable)
Fiber Optic Cable Assembly	Energetiq's proprietary optical fibers must be used with the EQ-99X-FC. Please visit www.energetiq.com/fibers for details.

Optional Accessories

Part Number	Description
EQ-99X-FC-EWP	12 Month Extended Warranty Protection for EQ-99X-FC
EQ-99-MGR	Smart controller with status monitoring, operating hours
EQ-99-COL-6-SMA	Fiber Collimator with SMA termination - 6.6 mm diameter beam
EQ-99-COL-6-FC	Fiber Collimator with FC termination - 6.6 mm diameter beam
EQ-99-COL-11-SMA	Fiber Collimator with SMA termination - 11 mm diameter beam
EQ-99-COL-11-FC	Fiber Collimator with FC termination - 11 mm diameter beam
EQ-99X-OTM	Optical Mounting Bracket for EQ-99X and EQ-99X-FC

Facility Requirements

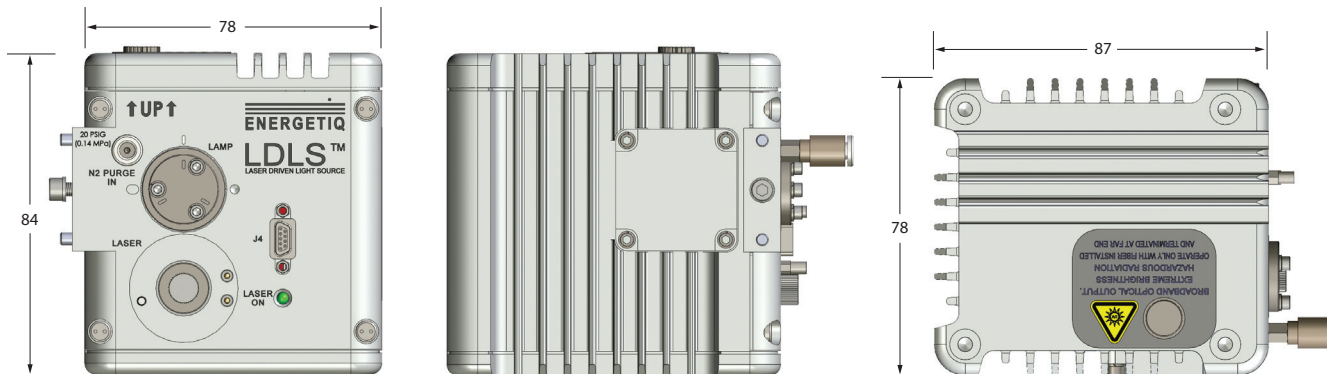
Electrical	100-240 V~; 2.5A; 50-60 Hz
Cooling	No auxiliary cooling required
Nitrogen Purge	Recommended. Grade 4.8 or higher, filtered to 5 µm. 20 psig ±2
Ambient Temperature	15-35°C

Physical Specifications

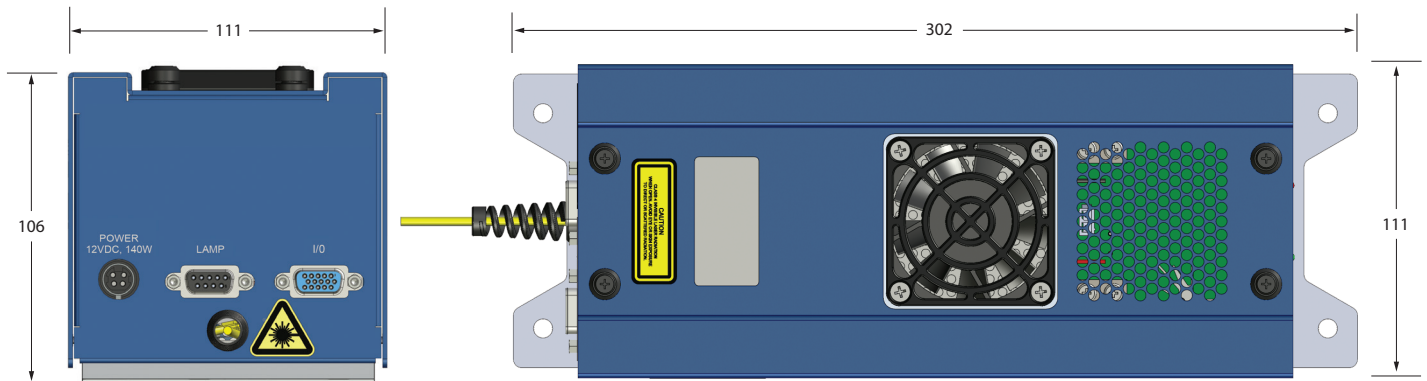
Lamp Head Dimensions (H x W x D)	84 x 78 x 87 mm
Lamp Head Weight	0.7 kg
Controller Dimensions (H x W x D)	106 x 111 x 302 mm
Controller Weight	1.4 kg

Lamp Head Dimensions (Unit: mm)

Drawings are for reference only and are not to scale. STEP-File available.



Controller Dimensions (Unit: mm)



www.energetiq.com/patents

