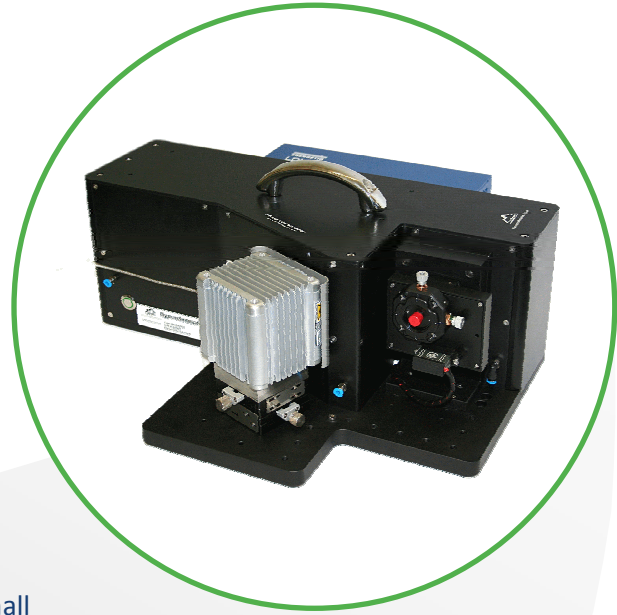




# The Hyperchromator

a highly efficient monochromator for LDLS™



The Hyperchromator is a high throughput monochromator originally designed for the Energetiq EQ-99X LDLS™.

With fast optics, up to f/1.5, it efficiently collects the light directly from the small plasma spot of the light source without an entrance slit. This monochromator is optimized for monochromatic illumination applications where a tunable output from a point source is required. Additionally, white light output is available (zero order reflection).

The output port has been designed with a very flexible opto-mechanical interface. This allows for a multitude of illumination or light coupling options using standard catalog components, rendering the integration of the Hyperchromator into your setup hassle free and straight-forward. Possible configurations include fiber coupling, collimated or free-beam output.

The Hyperchromator is motorized and may be controlled via USB/RS232 and an intuitive GUI. Options for external control include LabVIEW, Python and others – your inquiries are welcome!

Optical input	Energetiq EQ-99X light source, directly coupled (optionally many other light sources, optical fibers or manually adjustable entrance slit can be attached)
Optical output	Fused silica fiber, SMA or FC, 100-400µm core, or free beam output with adjustable slit or various collimator options. Spectral power monitoring on request.
Wavelength range	200 – 2500nm *
Aperture	f/1.5 or f/2, depending on required resolution and light output
Bandwidth	1-10nm FWHM *
Output power	Up to 500µW @ grating blaze wavelengths, 6nm bandwidth and 400µm fiber
Reproducibility	Typ. 0.1nm
Scanning speed	40-100nm/s *
Control interface	USB/RS-232, LabVIEW™-based GUI, various external control options
Dimensions and Weight	47 x 45 x 25cm (WxDxH); 16kg

\*depends on choice of grating and other requirements.



### KEY FEATURES

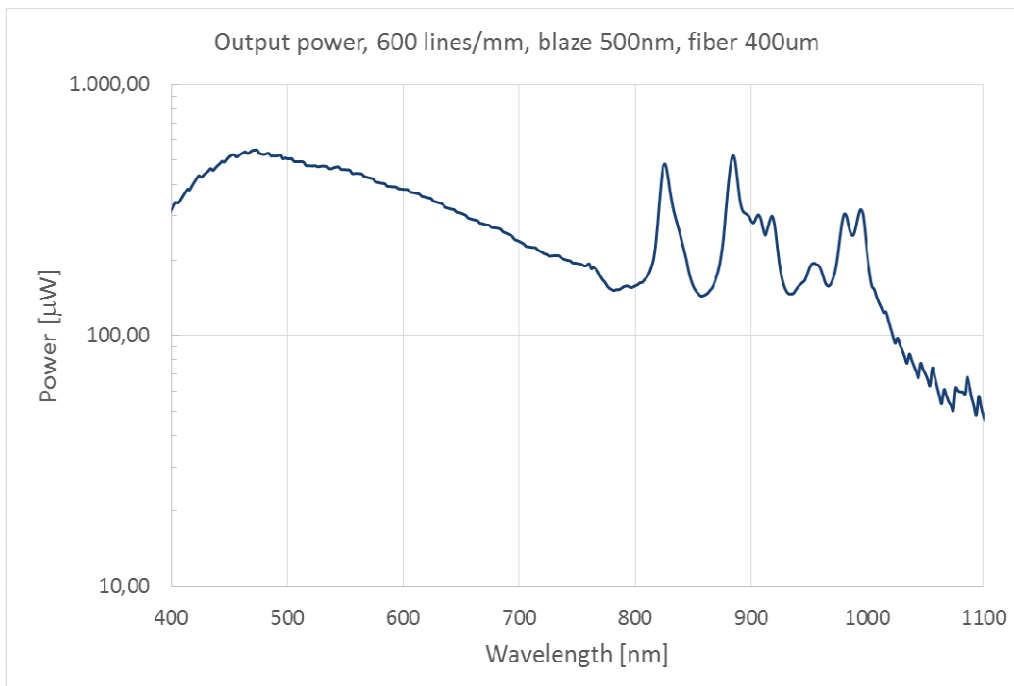
- Different configurations available
- Fast optics, up to f/1.5 for highest throughput
- Homogenous output distribution due to a proprietary design
- Etendue-matched to Energetiq LDLS
- Broad tunable range from UV to NIR
- Spectral power monitoring
- No input slit
- Built-In Shutter
- Easy to use Software, Windows GUI, LabView on request

Our **TUNABLE LIGHT SOURCE** consists of the Hyperchromator plus an ultra broadband, free-beam plasma source.

The EQ-99X laser-driven-light-source from Energetiq Technologies utilizes a diode laser to drive a high-intensity plasma, which emits light from 170nm through visible into near infrared. It provides life-time an order of magnitude longer than traditional lamps. Its supreme stability allows to work without an input slit.



EQ-99X lamp head



### About us:

Mountain Photonics is a well established distribution company located in Landsberg, Germany. We aim at adding value to our customers by offering technical service, product development and proprietary products.

