

Press Release

April 28, 2021

ELMO 780 High Power

Menlo Systems' femtosecond laser ELMO 780 High Power is a compact, frequency doubled erbium fiber laser optimized for OEM integration. The emission wavelength at 780 nm enables various applications within the scope of two-photon-polymerization (additive 3D printing), microscopy, and spectroscopy. The fundamental wavelength at 1560 nm can also be provided.

A compact, fiber coupled frequency doubling module facilitates beam delivery and prevents thermal impact on the optical system. With pulse energies of up to two nanojoule and pulse durations <100 fs at 780 nm wavelength, the ELMO 780 High Power combines compact and modular design with high peak power.

The laser modules do not require any driving unit and are easy to integrate due to the fiber coupled design. The additional dispersion compensation feature allows for the compensation of the dispersion caused by optics within the beam path, such as e.g. a microscope objective or an acousto-optical modulator. This way, high peak powers of up to 30 kW and pulse durations of less than 60 fs can be realized directly at the sample within the microscope, allowing significantly reduced writing times in 3D printing, or improved signal in multiphoton microscopy. Menlo Systems' proprietary figure 9[®] mode-locking technology guarantees reliable laser systems with stable parameters even under harsh conditions.



Figure: The ELMO 780 High Power provides femtosecond pulses at 780nm in a very compact design.

Contact:

Menlo Systems GmbH

Bunsenstr  e 5
82152 Martinsried, Germany
Phone: +49 89 189166 0
Fax: +49 89 189166 111
sales@menlosystems.com

www.menlosystems.com

Menlo Systems K.K.

12-5, Chuo Godo Building,
Naka-ku, Chuo 2-Chome,
Hamamatsu, Shizuoka,
Japan
jpsales@menlosystems.com

www.menlosystems.jp

Menlo Systems, Inc.

56 Sparta Avenue
Newton, NJ 07860, USA
Phone: +1 973 300 4490
Fax: +1 973 300 3600
ussales@menlosystems.com

About Menlo Systems:

Precision in Photonics. Together we shape light.

Menlo Systems GmbH is a leading developer and global supplier of instrumentation for high-precision metrology. The company with headquarters in Martinsried near Munich is known for its Nobel Prize winning optical frequency comb technology. With subsidiaries in the US and China and a global distributor network, Menlo Systems is closely connected to its customers from science and industry. The main product lines are optical frequency combs, time and frequency distribution, terahertz systems, ultrafast and ultrastable lasers, and corresponding control electronics. Besides standard production, Menlo Systems develops and manufactures custom made solutions for laser-based precision measurements.