

ELMO 780

Femtosecond Fiber Laser 780 nm



MenloSystems

KEY SPECIFICATIONS

- Wavelength 780 nm
- Output Power >140 mW
- Pulse Length <100 fs
- Repetition Rate 100 MHz
- Smallest Footprint - no external control unit
- Detachable SHG unit - no heat dissipation in optical setup
- Additional wavelength 1560 nm fiber coupled with >180 mW and < 70 fs pulse length

APPLICATIONS

- Amplifier Seeding
- THz Generation & THz Physics
- Ultrafast Spectroscopy
- Multi-Photon Excitation
- 2-Photon Polymerization and 3D Printing

FEATURES

- Handheld SHG Module
- High Stability
- Low Amplitude and Phase Noise
- All-PM Solution
- Single Mode-Lock State
- figure 9[®] Technology

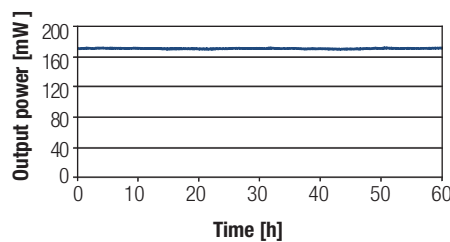
OPTIONS

- **VARIO**
User-Defined Repetition Rate
Factory-set value selectable in the 50-100 MHz range
- **MULTIBRANCH**
Additional Seed Ports
Multiple Ports with optional subsequent frequency conversion to cover multiple wavelengths
- **DISPERSION PRECOMPENSATION**
Dispersion precompensation to compensate dispersion of microscope objective and additional optics

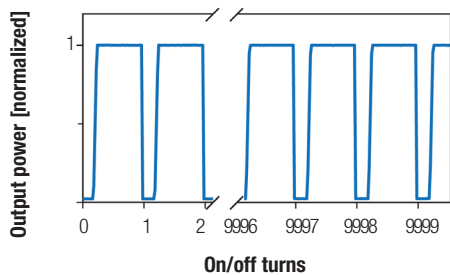
Menlo Systems' fiber-based femtosecond laser sources integrate the latest achievements in fiber technology into easy-to-use products. Menlo Systems' unique figure 9[®] mode locking technology results in reproducible and long-term stable operation. The ELMO 780 with its modular concept and its compact frequency doubling module is optimized for OEM integration and maximum versatility. The system is maintenance free and engineered for 24/7 operation.

PERFORMANCE DATA

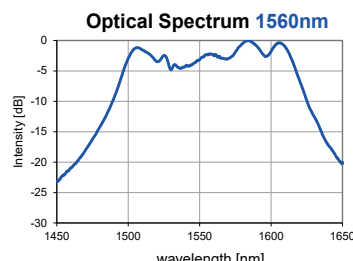
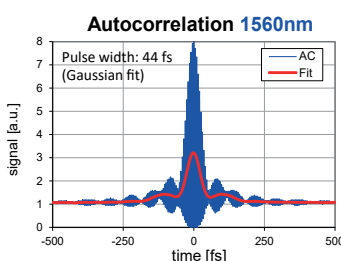
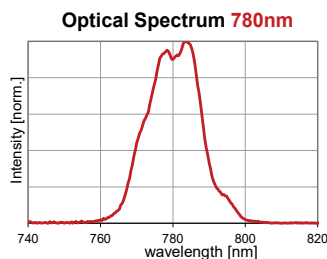
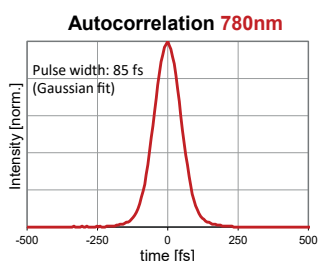
Amplitude noise
< 0.5% rms (over 24h)



Reproducibility
Identical and consistent laser performance



OPTICAL PERFORMANCE



ELMO 780

MenloSystems

Femtosecond Fiber Laser 780 nm

SPECIFICATIONS	ELMO780	ELMO780 HP
Center Wavelength	780 nm \pm 10 nm	
Average Power	>75 mW (typ. 85 mW)	>140 mW (typ. 165 mW)
Pulse Width	<100 fs (typ. 85 fs)	
Output Port	free space	
Polarization	linear, p-polarized**	
Dispersion Management	pigtailed and versatile SHG module with up to 0.5 m optical fiber supply*	
Repetition Rate	100 MHz (50-100 MHz with VARIO)*	
Output Port at 1560 nm*** Switchable 780 nm/1560 nm	fiber coupled, 1560 nm, >180 mW (typ. 210 mW), <70 fs (typ. 50 fs) after up to 0.8 m detachable polarization maintaining patch cord	
2nd Fiber-Coupled Seed Port	yes	
2nd High Power Output Port	available with MULTIBRANCH	

*Please inquire for your specific combinations of average power, pulse duration and repetition rate. ** the versatile handheld SHG module can also be mounted in s-polarized orientation

*** Output wavelength changeable from 780 nm to 1560 nm with additional patch cord

REQUIREMENTS

Operating Voltage	100/115/230 VAC ,12V external power supply included	
Power Consumption	20 VA	
Operating Temperature	15 °C - 35 °C	
Laser Head Dimensions/Weight	195 x 95 x 75 mm ³ / 2.9 kg	
SHG Dimensions/Weight	195 x 47 x 28 mm ³ / 0.5 kg	182 x 95 x 32 mm ³ / 1.0 kg
On/ Off Control	either via "Elmo Control" software with USB-connection or remote switching unit	
Warm-Up Time	<60 s	

ORDERING INFORMATION

Product Code	ELMO 780	ELMO 780 HIGH POWER
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Please call for pricing. Specifications are subject to change without notice. Custom modifications are available, please inquire.

MenloSystems



Invisible laser radiation
avoid exposure to beam
Class 3B laser

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