

# ELMO 780

## Femtosecond Fiber Laser 780 nm

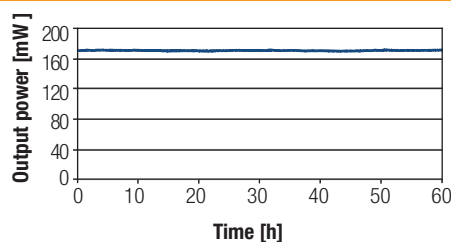


Menlo Systems' fiber-based femtosecond laser sources integrate the latest achievements in fiber technology into easy-to-use products. Menlo Systems' unique figure 9® mode locking technology results in reproducible and long-term stable operation. The ELMO 780 with its modular concept and its compact frequency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

### PERFORMANCE DATA

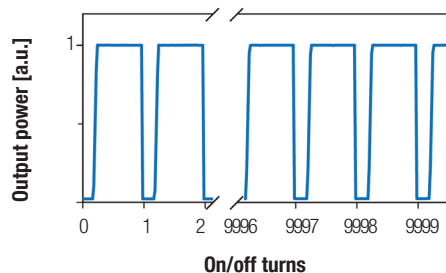
#### Amplitude noise

< 0.5% rms (over 24h)

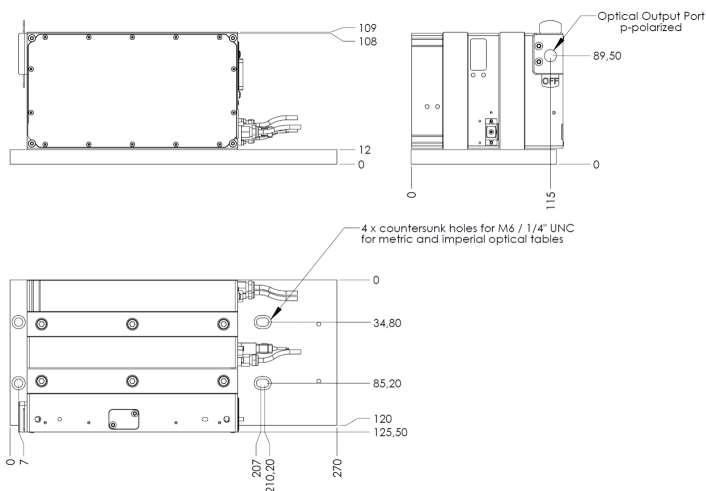


#### Reproducibility

Identical and consistent laser performance



### TECHNICAL DRAWING



**MenloSystems**

### KEY SPECIFICATIONS

- Wavelength 780 nm
- Output Power >140 mW
- Pulse Length <100 fs
- Repetition Rate 100 MHz
- Smallest Footprint - no external control unit

### 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

# ELMO 780



## Femtosecond Fiber Laser 780 nm

### SPECIFICATIONS

#### ELMO780

#### ELMO780 HP

Center Wavelength	780 nm $\pm$ 10 nm	
Average Power	>75 mW	>140 mW
Pulse Width	<100 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)*	
Auxiliary Output Port at 1560nm	fiber-coupled, 1560 nm, >180 mW, <90 fs pulse width after up to 0.5 m external 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 <sup>3</sup> / 2.9 kg	
SHG Dimensions/Weight	195 x 47 x 28 mm <sup>3</sup> / 0.5 kg	182 x 95 x 32 mm <sup>3</sup> / 1.0 kg
On/ Off Control	either via "Elmo Control" software with USB-connection or remote switching unit	
Warm-Up Time	<60 s	

Please call for pricing. Specifications are subject to change without notice. Custom modifications are available, please inquire.

### ORDERING INFORMATION

Product Code	ELMO 780	ELMO 780 HIGH POWER
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Invisible laser radiation  
avoid exposure to beam  
Class 3B laser

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