

ELMO

Femtosecond Fiber Seed Laser 1560 nm

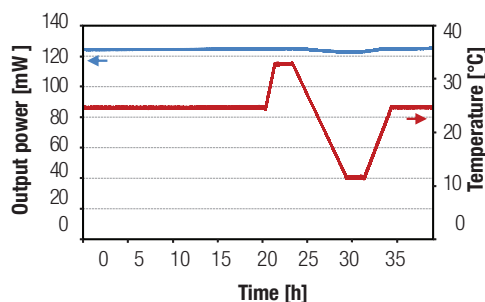


Menlo Systems' fiber-based femtosecond laser sources integrate the latest achievements in fiber technology into easy-to-use products. Menlo Systems' unique figure 9[®] mode locking technology results in reproducible and long-term stable operation. The ELMO with its all-fiber design guarantees excellent stability and low-noise operation. As seed source for fiber amplifiers the oscillator is maintenance free, user installed and ready to use at the press of a single button. In short: An OEM laser engineered for 24/7 operation.

PERFORMANCE DATA

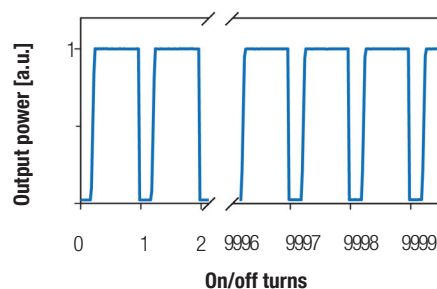
Amplitude noise

< 1.5% rms (over 24h in temperature cycles from 10-30 °C)



Reproducibility

Identical and consistent laser performance



MenloSystems

KEY SPECIFICATIONS

- Wavelength 1560 nm
- Output Power >1 mW
- Output Power up to 200 mW in High Power Configuration
- Repetition Rate 50-100 MHz

APPLICATIONS

- Amplifier Seeding
- THz Generation & THz Physics
- Ultrafast Spectroscopy

FEATURES

- High Stability
- Low Amplitude and Phase Noise
- All-PM Solution
- Single Mode-Lock State
- figure 9[®] Technology
- Laser Output in Less than 60 Seconds after Pressing On-Button

OPTIONS

- **HIGH POWER**
Including matched fiber amplifier ELMA to boost average output power up to 200 mW
- **VARIO**
User-Defined Repetition Rate
Factory-set value selectable in the 50-100 MHz range
- **MULTIBRANCH**
Additional Seed Ports
Seeding of multiple amplifiers with optional subsequent frequency conversion to cover multiple wavelengths

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SPECIFICATIONS	ELMO	ELMO HIGH POWER
Center Wavelength	1560 nm ± 30 nm	1560 nm ± 30 nm
Average Power	>1 mW	>100 mW (up to 200mW)*
Pulse Energy	>1.0 pJ	>1.0 nJ
Pulse Width	chirped	<90 fs
Repetition Rate	100 MHz (50-100 MHz with VARIO)*	100 MHz (50-100 MHz with VARIO)*
Output Port	fiber-coupled, SC/APC	fiber-coupled, SC/APC
Dispersion Management	dispersion can be factory set to achieve short pulses after 1-10 m of additional fiber	dispersion can be factory set to achieve short pulses after 1-10 m of additional fiber
2nd Fiber-Coupled Seed Port	yes	yes
2nd High Power Output Port	n.a.	available with MULTIBRANCH
Polarization	linear, PM fiber	linear, PM fiber

*Please inquire for your specific combinations of average power, pulse duration, repetition rate and external fiber length.

REQUIREMENTS

Operating Voltage	12 VDC/2 A**	12 VDC/2 A**
Power Consumption	10 VA	20 VA
Operating Temperature	15 °C - 35 °C	15 °C - 35 °C
Laser Head Dimensions/Weight	195 x 95 x 28 mm ³ / 0.7 kg	195 x 95 x 75 mm ³ / 2.9 kg
Warm-Up Time	<60 s	<60 s

** Power supply for 100/115/230 VAC can be provided as option.

ORDERING INFORMATION

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

