

ELMO

Femtosecond Fiber Laser 1560 nm

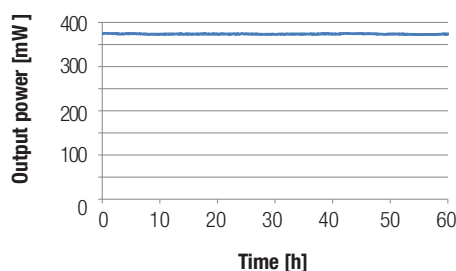


Menlo Systems' fiber-based femtosecond laser sources integrate the latest achievements in fiber technology into easy-to-use products. Menlo Systems' unique figure 9[®] mode locking technology results in reproducible and long-term stable operation. The ELMO with its all-fiber design guarantees excellent 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

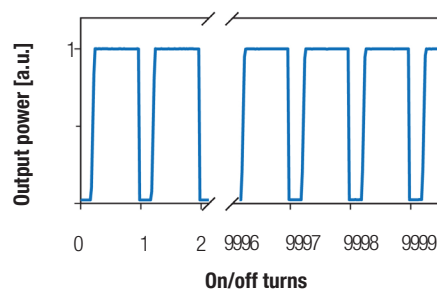
Amplitude noise

< 0.5% rms (over 24h)



Reproducibility

Identical and consistent laser performance



MenloSystems

KEY SPECIFICATIONS

- Wavelength 1560 nm
- Output Power : >330 mW in free space version, up to 200 mW with fiber coupling
- Repetition Rate 50-100 MHz
- Pulse Width down to 45 fs

APPLICATIONS

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

FEATURES

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

OPTIONS

- **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

Femtosecond Fiber Seed Laser 1560 nm

SPECIFICATIONS	ELMO	ELMO HIGH POWER	ELMO HIGH POWER-FS
Center Wavelength	1560 nm \pm 30 nm	1560 nm \pm 30 nm	1560 nm \pm 30 nm
Average Power	>10 mW	>180 mW	>330 mW
Pulse Width	<150 fs (typ. 100 fs)	<60 fs (typ. 45 fs)	<90 fs (typ. 70 fs)
Output Port	fiber-coupled	fiber-coupled	free space
Polarization	linear, PM fiber	linear, PM fiber	linear, p-polarized
Dispersion Management	dispersion can be factory set to achieve short pulses after 0.5-30m of external fiber	dispersion can be factory set to achieve short pulses after 0.5-30m of external fiber	external patch cord length of 0.5m to external compressor module**
Repetition Rate	100 MHz (50-100 MHz with VARIO)*	100 MHz (50-100 MHz with VARIO)*	100 MHz (50-100 MHz with VARIO)*
2nd Fiber-Coupled Seed Port		yes	yes
2nd High Power Output Port	available with MULTIBRANCH	available with MULTIBRANCH	available with MULTIBRANCH

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

**Free space version with additional compressor module, versatile handheld compressor : module can also be mounted in s-polarized orientation. Standard external patch cord length 0.5m

REQUIREMENTS	ELMO	ELMO HIGH POWER	ELMO HIGH POWER-FS
Operating Voltage	12 VDC/1 A***	12 VDC/2 A***	12 VDC/2 A***
Power Consumption	10 VA	20 VA	20 VA
Operating Temperature	15 °C - 35 °C	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 /2.5 kg	195 x 95 x 75 mm ³ /2.5 kg
Compressor Dimensions/Weight	-	-	182 x 95 x 32 mm ³ /1 kg
Warm-Up Time	<60 s	<60 s	<60 s

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

ORDERING INFORMATION

Product Code	ELMO	ELMO High Power	ELMO High Power-FS

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



Invisible laser radiation
avoid exposure to beam
Class 3B laser

