C-Fiber

Femtosecond Fiber Laser 1560 nm

MenloSystems

Menlo Systems' fiber-based femtosecond laser sources integrate the latest achievments in fiber technology into easy-to-use products. Menlo Systems' unique figure 9® design results in reproducible and long-term stable operation. It is based on the well-established nonlinear optical loop mirror (NOLM) mode locking mechanism. Both oscillator and amplifier use polarization maintaining (PM) fiber components only, ensuring excellent stability and low-noise operation. The laser is maintenance free, user installed and ready to use at the press of a single button. Customize your laser with the available options to match the requirements of your application.

KEY SPECIFICATIONS

- Wavelength 1560 nm
- Output Power >500 mW
- Pulse Length <90 fs
- Repetition Rate 50-250 MHz

APPLICATIONS

- Synchronization and Timing
- Ultrafast Spectroscopy
- Supercontinuum Generation
- Material Characterization
- Testing at Telecom Wavelengths

FEATURES

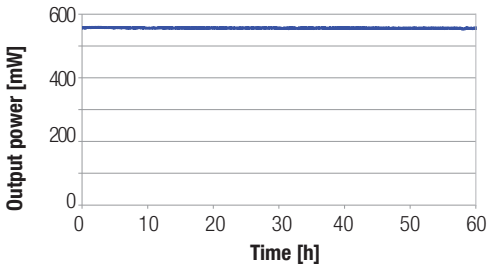
- High Stability
- Low Amplitude and Phase Noise
- All-PM Solution
- Single Mode-Lock State
- Menlo figure 9® Technology

OPTIONS

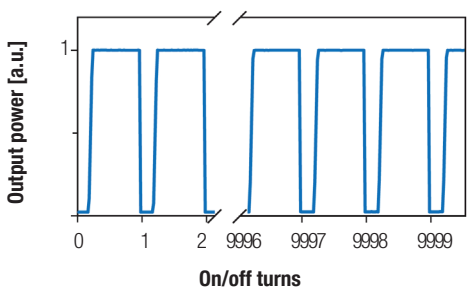
- **SYNC100**
  Repetition Rate Synchronization
  Tunable cavity length by high-bandwidth piezo-controlled synchronization
- **RRE-SYNCRO**
  Repetition Rate Stabilization
  Feedback electronics to phase lock pulses to an external clock (see separate data sheet for more details)
- **VARIO**
  User-Defined Repetition Rate
  Factory-set value selectable in the 50-250 MHz range
- **MULTIBRANCH**
  Additional Seed Ports
  Seeding of multiple amplifiers with optional subsequent frequency conversion to cover multiple wavelengths

PERFORMANCE DATA

Amplitude noise
< 0.5% rms (over 24h)



Reproducibility
Identical and consistent laser performance



C-Fiber

Femtosecond Fiber Laser 1560 nm

MenloSystems

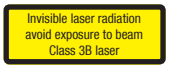
SPECIFICATIONS	C-FIBER	C-FIBER HIGH POWER
Center Wavelength	1560 nm ± 20 nm	1560 nm ± 20 nm
Average Power	>100 mW	>500 mW
Pulse Energy	>1 nJ	>5 nJ
Pulse Width	<90 fs	
Repetition Rate	100 MHz (50-250 MHz with VARIO)*	
Repetition Rate Instability	<1 ppm over 20 hours at constant temperature	
Timing Jitter	<2 fs [rms, 10 kHz.. 10 MHz]	
Output Port	fiber-coupled (FC/APC)	free space
Additional Fiber-Coupled Seed Port	1 (up to 4 with MULTIBRANCH)	
Polarization	linear, PM fiber	linear, s-polarized
Beam Height	n.a.	102 mm

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

REQUIREMENTS		
Operating Voltage	100/115/230 VAC	
Frequency	50 to 60 Hz	
Power Consumption	120 VA	
Cooling Requirements	no water cooling is required	
Laser Head Stabilization	actively temperature stabilized	
Operating Temperature	15 °C - 35 °C	
Laser Head Dimensions/Weight	413 x 90 x 178 mm³ / 7 kg	413 x 120 x 178 mm³ / 10 kg
Control Unit Dimensions/Weight	448 x 132 x 437 mm³ / 10 kg	448 x 132 x 437 mm³ / 12 kg
Warm-Up Time	<60 s	

ORDERING INFORMATION		
Product Code	C-Fiber	C-Fiber HIGH POWER

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



MenloSystems

Menlo Systems GmbH
T+49 89 189 166 0
sales@menlosystems.com

Menlo Systems, Inc.
T+1 973 300 4490
ussales@menlosystems.com

Thorlabs, Inc.
T+1 973 579 7227
sales@thorlabs.com