C-Fiber

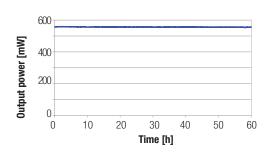
Femtosecond Fiber Laser 1560 nm



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.

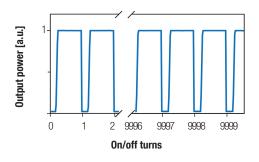
PERFORMANCE DATA

Amplitude noise < 0.5% rms (over 24h)



Reproducibility

Identical and consistent laser performance



MenioSystems

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

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

C-Fiber



Femtosecond Fiber Laser 1560 nm

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	1	100/115/230 VAC	
Frequency		50 to 60 Hz	
Power Consumption		120 VA	
Cooling Requirements	no wa	no water cooling is required	
Laser Head Stabilization	actively	actively temperature stabilized	
Operating Temperature		15 °C - 35 °C	
Laser Head Dimensions/Weight	413 x 90 x 178 mm ³ / 7 kg	413 x 120 x 178 mm ³ / 10 kg	
Control Unit Dimensions/Weight	448 x 132 x 437 mm ³ / 10 kg	448 x 132 x 437 mm ³ / 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.





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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

