

## C-Fiber/M-Fiber: 1560 nm Femtosecond Fiber Lasers

### C-Fiber Laser Series

The C-Fiber laser series consists of erbium-doped fiber lasers, each with a 100 MHz repetition rate. They are available with various power levels and offer a high degree of flexibility, including user-defined repetition rates and freely configurable optical output ports.

The passively mode-locked, state-of-the-art laser allows turnkey operation through an embedded microcontroller and is the ideal choice for demanding applications in the ultrafast world of science and industry.

### M-Fiber Laser Series

The M-Fiber lasers run at a 250 MHz repetition rate on our scientific platform, delivering pulses with power levels above 400 mW.

By adding the SYNC option to the C-Fiber and the M-Fiber series, the cavity length becomes tunable, and the repetition rate can be synchronized to an external pulsed source. An integrated stepper motor allows for coarse adjustment, and with the help of the piezo actuator, the repetition rate can be fine tuned and locked to an external reference frequency. For details on the synchronization electronics, see the information on SYNCRO-RRE, which can be found on page 1526.



### Advanced Features and Benefits

- Average Output Power: >400 mW @ 250 MHz
- Pulse Length: <90 fs
- Synchronization to External Clock Signal
- Highest Stability, Reliable Operation
- Truly Turnkey Operation by Self-Starting Mode-Locking Mechanism
- Embedded Microcontroller for Trouble-Free Operation
- Long Lifetime and Low Cost of Ownership

### Applications

- Time-Resolved Spectroscopy
- Diagnostics and Imaging in Biology and Medicine
- Timing Distribution Systems
- THz Generation, THz Spectroscopy

### Specifications

	C-Fiber	C-Fiber HP	C-Fiber A	M-Fiber	M-Fiber A
Wavelength	1560 ± 20 nm				
Repetition Rate	100 MHz			250 MHz	
Average Output Power	>30 mW	>150 mW	>250 mW	>75 mW	>400 mW
Pulse Width	<150 fs	<90 fs		<150 fs	<90 fs
Repetition Rate Tuning Range*	>330 kHz			>2 MHz	

\* with SYNC100 or SYNC250 Option

The scientific lasers of the C-Fiber and M-Fiber series are also available with an added second harmonic generation stage. Please see C-Fiber/M-Fiber A 780 on page 1529 or visit [www.menlosystems.com](http://www.menlosystems.com).

ITEM #	\$	£	€	RMB	DESCRIPTION
C-Fiber			CALL		fs Fiber Laser, >30 mW @ 100 MHz
C-Fiber HP			CALL		fs Fiber Laser, >150 mW @ 100 MHz
C-Fiber A			CALL		fs Fiber Laser, >250 mW @ 100 MHz
M-Fiber			CALL		fs Fiber Laser, >75 mW @ 250 MHz
M-Fiber A			CALL		fs Fiber Laser, >400 mW @ 250 MHz

For local and updated pricing, please call Menlo Systems, Inc. in North America 973-300-4490, Menlo Systems GmbH in Europe +49-89-189-1660, or Thorlabs Japan, Inc. in Asia +81-3-5979-8889, or email [sales@menlosystems.com](mailto:sales@menlosystems.com).