# Fermion III Series Higher Power Fiber Coupled Lasers



# **Features**

- 375nm to 1064nm
- Narrow linewidths
- up to 450mW
- Popular 100μm core fiber
- High stability
- Variable output
- Modulation
- Temperature stabilized
- Many accessories
- Certified Turnkey System

The Fermion III Series of Turnkey Fiber Coupled Lasers are designed to make using lasers easy and convenient. All lasers are coupled to popular  $100\mu m$  core fiber for a consistent beam across all wavelengths. Lasers are also temperature controlled for high output power stability.

A range of discrete wavelengths cover the span from 375nm to 1064nm. There are two categories of lasers, standard Fabry Perot type and grating stabilized ones..

Output power is adjustable using the knob or an external voltage source. The laser can run in CW or pulsed mode. Standard connection uses an FC connector. All lasers come with a 1 meter length of detachable fiber. Longer lengths of fiber are available so that the laser instrument can be located away from the experiment.

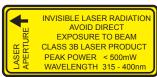
These lasers are excellent choices for microscopy, fluorescence excitation, photodynamic therapy, disease diagnostics, Raman spectroscopy, cytometry, forensics, material analysis, pumping, illumination and many other applications.

Accessories include fiber collimators, larger core fibers and-fiber splitters.

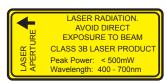
# **Fermion III Series**

# **Specifications**

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Wavelengths:	375nm to 1064nm			
Wavelength tolerance:	<u>+</u> 0.5nm to <u>+</u> 10nm			
Spectral width:	<0.5nm and <2nm			
Output powers:	64mW to 450mW			
Internal fiber:	100μm core			
Back panel:	BNC, interlock BNC, laser monitor			
Front panel:	FC, laser output BNC, modulation or remote input			
Power requirements:	90-125 VAC, 190-250 VAC, 47-63Hz			
Operating temperature range:	15 to 30°C (non condensing)			
Storage temperature range:	0 to 60°C			
Compliance:	CDR 21 CFR 1040.10 certified system and IEC 60825-1.2 compliant for end users.			







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ı	Wavelength:	Max. Power:			
ı	I <sub>th</sub> :	I <sub>DL</sub> :			
ı	Manufactured:				
ı	Micro Laser Systems, Inc.				
ı	12841 Western Ave. Suite H, Garden Grove, CA 92841				
ı	Complies with IEC 60825-1(A2) and 21CFR1040, except for				
ı	deviations persuant to	Laser Notice No.50 dated July 26 2001.			

Labels are illustrated here to comply with 21 CFR 1040.10 as applicable under the radiations for health and safety act of 1986. Complies with IEC60825-1.2.

# **Options Collimators**

A series of Fiber Collimators to generate 5mm to 45mm beams sizes snap onto the end of the fiber to give a collimated beam. Collimators have adjustable focus so you can adjust the spot size.

## Custom

OEM versions of these lasers are available to OEM users. Laser, additional optics and detectors can be integrated for a customized system.

# **Ordering Information**

# Linewidth < 2 nm

Model #	Wavelength	Power
FI3 375M-150/FC	375 <u>+</u> 5nm	150 mW
FI3 405M-450/FC	405 <u>+</u> 5nm	450 mW
FI3 450M-450/FC	450 <u>+</u> 5nm	450 mW
FI3 473M-450/FC	473 <u>+</u> 5nm	450 mW
FI3 488M-150/FC	488 <u>+</u> 5nm	150 mW
FI3 525M-450/FC	525 <u>+</u> 10nm	450 mW
FI3 638M-450/FC	638 <u>+</u> 5nm	450 mW
FI3 808M-450/FC	808 <u>+</u> 5nm	450 mW
FI3 830M-300/FC	830+/-10nm	300 mW

### **Stabilized Lasers**

Model #	Wavelength (nm)	Linewidth typical (nm)	Power (mW)
FI3 785N-450/APC	785 <u>+</u> 0.5	0.1	450
FI1 830N-450/APC	830 <u>+</u> 0.5	0.1	450
FI3 976N-300/APC	976+/-1	1.0	300
FI3 980N-300/APC	980+/-1	1.0	300
FI3 1064N-150/APC	1064 <u>+</u> 2	< 0.1	150

Please call for other wavelengths, power levels or accessories.

Specifications subject to change without notice.

