

# Optromix - SFES / SFEM

## CW Single-Frequency Fiber Laser Module

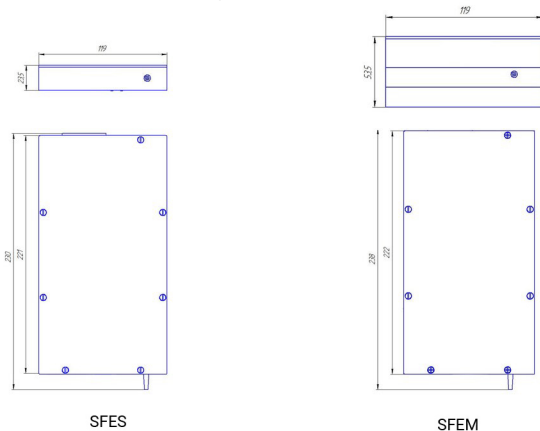
Wavelengths: Standard 1550 nm, 1556 nm, 1560 nm  
Custom: 1530 – 1580 nm

### KEY FEATURES

- Ultra-Narrow Linewidth
- Thermal Wavelength Tuning
- Fast Piezo Tuning
- Low RIN Level
- Computer Control



### DIMENSIONS



## Specifications Optical

Parameter	SFES	SFEM
Operating mode	CW, Single Frequency, TEM <sub>00</sub>	
Central Wavelength <sup>1</sup>	1550 nm, 1556 nm, 1560 nm	
Linewidth (FWHM) <sup>2</sup>	< 10 kHz	
Nominal Output Power	40 mW	500 mW, 1W, 2W
Power Stability <sup>3</sup>	< 1% (typical <0.5%)	
Piezo Tuning Range <sup>4</sup>	0.4 nm	
Thermal Tuning Range <sup>3</sup>	-0.14/+0.28 nm	
Polarization	Linear, (PER>20 dB)	
Optical Output <sup>6</sup>	Patch Cord with an FC/APC connector	
RIN level (peak: app 1.4 MHz)	<-105 dB/Hz@peak, <-140 dB/Hz@10MHz	

### Notes

1. Custom wavelengths 1530 – 1580 nm.

2. Custom Linewidth < 1 kHz

3. Over 1 Hour with base temperature constant within 0.2 °C after 30 minute warm-up

4. Option. External PZT Driver 0-120V, modulation up to 10 kHz

5. Option.

6. Optional output: Bare Fiber, FC connector, Collimator, by demand

## Electrical / Mechanical / Environmental

Parameter	Optromix-SFES	Optromix-SFEM
Power Supply Requirements <sup>1</sup>	+5 V	
Power Consumption (1W output)	< 75 W	
Control Connector <sup>2</sup>	Ethernet	
Cooling	Ambient Air	External Forced Air
Dimensions (WxHxD)	119 mm x 23.5 mm x 238 mm	119 mm x 53.5 mm x 238 mm
Weight	< 1 kg	< 2 kg
Operation temperature	15 – 35 °C	
Storage temperature	-40 – +70 °C	
Operation Humidity	10 – 85 %	
MTBF	> 10,000 Hrs	
Standard Patch Cord Length	1.2 m	

### Notes

1. Optional: Power Supply Unit

2. Optional Connectors: RS232, USB

Warranty: Standard Warranty - 12 months from the date of delivery.

Product code:

Optromix-SFES/SFEM-15xx-yyyy-cc

xx Wavelength (nm)  
 yyyy Output power (mW)  
 cc Optical output: FA - FC/APC, FC - FC connector, CL - Collimator, IS - Isolator

Information in this document is a subject to change without notice.



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