

# Optromix - SFE

## CW Single-Mode 1.5 $\mu\text{m}$ Fiber Laser

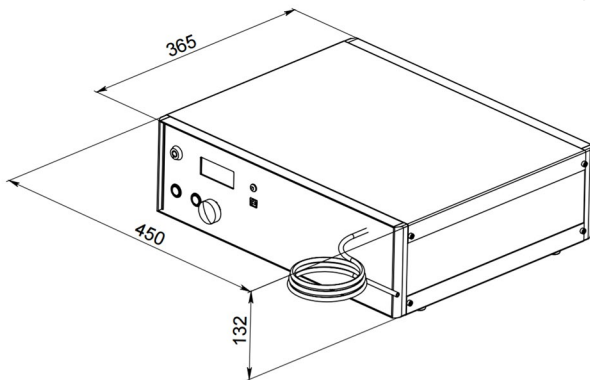
Central Wavelength Standard: 1550, 1556, 1560 nm  
Custom: Any within the range 1530 – 1580 nm

### KEY FEATURES

- Ultra Narrow Linewidth
- High Power Stability
- High Beam Quality
- Thermal Wavelength Tuning
- Computer Control



### DIMENSIONS



Housing for 2 W, 5 W, 10 W output power model.

# Specifications

## Optical

Parameter	Optromix-SFE
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>	< 5 kHz (typical < 2.5 kHz)
Nominal Output Power	0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10 W
Power Stability <sup>3</sup>	< 1% (typical < 0.5%)
Beam quality (M <sup>2</sup> )	< 1.05 (typical < 1.02)
Piezo Tuning Range <sup>4</sup>	+/- 15 pm
Thermal Tuning Range	+/- 0.15 nm
Polarization	Linear (PER > 23dB)
Optical Output <sup>5</sup>	Armed Fiber with a Collimator or Isolator
RIN level (peak: app 0.9 MHz)	<-110dB/Hz@peak, <-140dB/Hz@10MHz
Output Power Tunability	10 – 100%

### Notes

1. 15\*\* nm by demand, 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. Optional output: Bare Fiber, FC or FC/APC connector (< 5W output)

## Electrical / Mechanical / Environmental

Parameter	Optromix-DSE
Power Supply Requirements	100–240V, 50–60Hz, Single Phase
Power Consumption (10W output)	< 500 W
Control Connector <sup>1</sup>	USB
Cooling	Forced Air
Dimensions (WxHxL)	≥ 2 W output: 450 mm x 132 mm x 365 mm < 2 W output: 342 mm x 95 mm x 365 mm
Weight	< 18 kg
Operation temperature	10 – 35 °C
Storage temperature	- 40 – +70 °C
Operation Humidity	10 – 85 %
MTBF	> 10,000 Hrs
Standard Patch Cord Length <sup>2</sup>	1.2 m

### Notes

1. Optional Connectors: RS232, Ethernet

2. Optional length: Up to 5 m

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

Product code:

Optromix-SFE-15xx-yyyyy-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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