

[OELAS-SFL]

## Single Frequency Fiber Laser Sources

**OELAS-SFL**

### Features:

- High power
- Ultra-Narrow Linewidth
- Single Longitudinal Mode (SLM) Operation
- High Optical Signal-to-Noise Ratio (OSNR)
- Low Phase and Intensity Noise
- Custom wavelength
- Custom linewidth
- Tunability
- Stable output
- Turn-key solution
- Air-cooled package

### Applications:

- Medical
- Acoustic sensing
- Fiber Sensing
- LIDAR and remote sensing
- Raman Spectroscopy
- Quantum Technologies
- Coherent communication
- Interferometry
- Optical testing
- High-Resolution Spectroscopy
- R&D

### Product description:

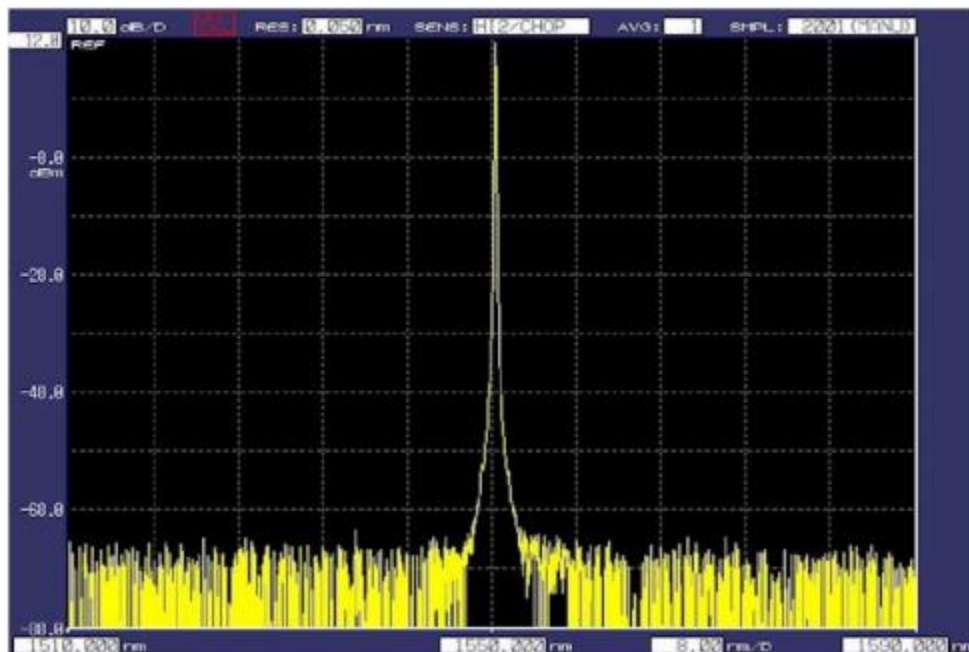
Our Narrow Linewidth Single Longitudinal Mode (SLM) Fiber Laser Sources, model OELAS-SFL, are engineered for unparalleled precision and reliability in demanding scientific and industrial applications. Leveraging advanced fiber-optic technology, these lasers deliver ultra-narrow linewidths (as low as <math><1\text{ kHz}</math>), exceptional wavelength stability, and high optical signal-to-noise ratios (up to 80 dB).

With single-frequency operation and optional polarization-maintaining output, they ensure superior coherence and low noise, making them ideal for applications such as Doppler LIDAR, high-resolution spectroscopy, coherent communications, and optical sensing. Available in a range of wavelengths (1010 nm to 2100 nm) and power outputs (10 mW to 10 W), our compact, robust designs integrate seamlessly into both OEM and turnkey systems. Built for performance and versatility, these laser sources empower cutting-edge research and industrial solutions with unmatched spectral purity and stability.

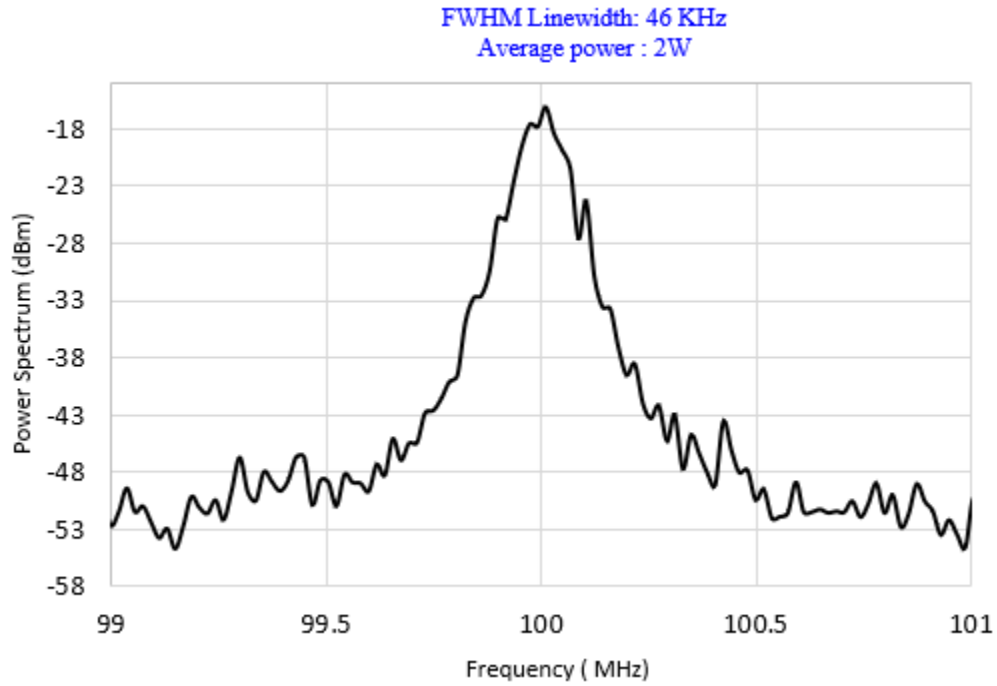
### Product specifications:

Parameter	Unit	1 $\mu\text{m}$	1.5 $\mu\text{m}$	2 $\mu\text{m}$
Center Wavelength	nm	1010-1120	1520-1580	1850-2100
Center Wavelength precision	nm	$\pm 0.05$		
Linewidth	kHz	< 5, or custom linewidth		
Output power	mW	10; 100; 1000		
ASE suppression	dB	> 50		
Tunable Option	-	Yes; Temperature-tunable, or Piezo-tunable		
Output fiber type	-	SM; PM		
Output Port	-	FC, ST, SC or free-spaced (collimated beam)		
Polarization	-	Linear or random		
Operating Temperature	$^{\circ}\text{C}$	0 - 50		
Dimension	mm	70 x 190 x 310		

### Product spectrum:



OELAS-SFL-1550



Ordering number:

OELAS-SFL-WL-P:	WL	P
	Center Wavelength (nm): WL=1010 to 2100 nm	Average power (mW): P=1: 10 mW P=2: 100 mW P=3: 1000 mW
Example:	OELAS-SFL-1550-1	