



Erbius SF Product Line

Powerful single-frequency CW 1560 (1535-1580) nm fiber Laser Erbius-SF-15xxX series

Key features

- Single-frequency
- Ultra-narrow linewidth (<1 kHz)
- TEM₀₀ mode
- Superior beam quality ($M^2 < 1.05$)
- Thermal wavelength tuning
- Fast piezo tuning
- Additional output for wavelength monitoring

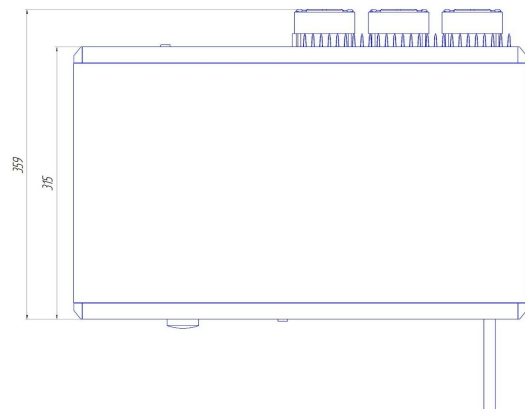
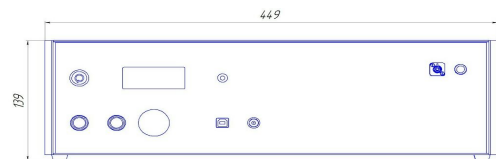


Erbius-SF-1560X is a powerful single-frequency 1560 nm (1535 - 1580 nm optional) Er-doped fiber laser with the wide-range thermal wavelength tuning and optional active wavelength control. SF series key parameter is an ultra-narrow linewidth (< 1 kHz) based on the longitudinal single mode.

Erbius is controlled by the on-board digital display, switches, and adjustment controllers. Erbius comes with a piezoelectric tuning for external or built-in (optional) wavelength modulation at kHz bandwidth for locking purposes. A full set of control electronics and power supply are included in the delivery package. The control interface software provides optionally. This is a perfect tool due to excellent performance, high reliability, and lower cost.

Applications

- Atomic trapping and cooling
- Optical tweezers
- Optical sensing
- LIDAR
- Other





Erbium-SF-15**X specifications

| Parameter | Erbium-SF-1560X | Erbium-SF-1550X |
|---------------------------------|---|-----------------|
| Operating mode | CW, Single Frequency, TEM ₀₀ | |
| Central wavelength | 1560 nm | 1550 nm |
| Linewidth (FWHM) | < 1kHz | < 10 kHz |
| Nominal output power | 1W, 2W, 5W, 10W | |
| Fast piezo tuning | PZT by default for external generator (built-in generator optional) | |
| Piezo tuning range | 20 pm | |
| Thermal tuning range (optional) | 500 pm | |
| Long term instability | < 1% | |
| Polarization | Linear or random | |
| Beam quality (M ²) | < 1.05 | |
| Control interface | Wavelength control output, Front panel with display, RS232/USB (optional) | |
| Operating voltage | 110 - 130V, 220 - 240 V, 50 - 60 Hz, Single Phase | |
| Operation temperature | 10 - 50 °C | |
| Storage temperature | - 40 - +70 °C | |
| MTBF | > 10.000 Hrs | |
| Operation Humidity | 10 - 85 % | |
| Cooling | Forced air | |
| Dimensions (WxHxL) | 449 mm x 139 mm x 359 mm | |
| Weight | < 11 kg | |

- Optromix fiber systems can be customized by request.
- Warranty: 1 year.



Ordering Information:

| Product Code | Erbium-SF-15xxX-yy-cc | xx: | Wavelength (nm) |
|--------------|-----------------------|-----|--|
| | | yy: | Output power (mW) |
| | | p: | Polarization: L - linear, R - random |
| | | cc: | Optical output: FC - fiber coupled, CM - collimator, FS - free space, FA = FC/APC FU = SC/UPC, SA = SC/APC SU = SC/UPC |

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

