

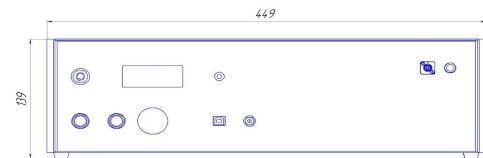


## Irybus SF Product Line

### Single Frequency CW 1030 (1030-1100) nm High Power fiber Laser Irybus-SF-10\*\*-X\*\*-R(L)\*\* series

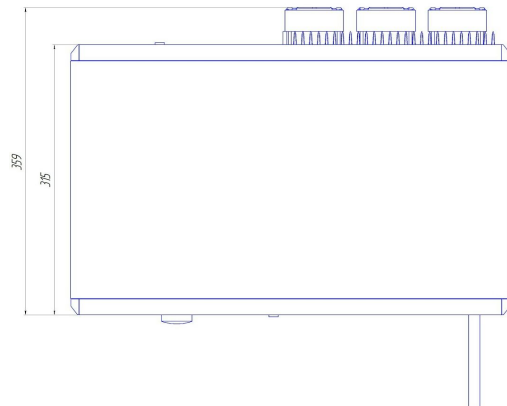
#### Key features

- Single Frequency
- Narrow linewidth (<100 kHz)
- Wavelength 1030 -1100 nm
- High output power ( 1-15W)
- Superior beam quality ( $M^2 < 1.05$ )
- High Power stability
- Thermal wavelength tuning



#### Application

- LIDAR
- Spectroscopy
- Optical tweezers
- Fiber optics sensing
- Second-harmonic generation
- Atomic trapping and cooling
- Measurements



Irybus-SF-1030-X is a single frequency high power low noise 1030 nm - 1100 nm Yb-doped fiber laser with wide-range thermal wavelength tuning and optional active wavelength control. SF series key parameter is ultra narrow linewidth (< 100 kHz) based on longitudinal single mode. Irybus are controlled by the on-board digital display, switches, and adjustment controllers. The Irybus comes with a piezoelectric tuning with internal and external wavelength modulation at kHz bandwidth for locking purposes. The Irybus-SF-1030-X can be customized by collimator fiber termination. A full set of control electronics and power supply are included to the delivery package. The control interface software provides optionally. This is a perfect tool for research labs due to excellent performance, high reliability, and lower cost.

## Irybus-SF-10\*\*-X\*\*-R(L)\*\* series specification

| Parameter                             | Irybus-SF-1030-X   | Irybus-SF-1093-X |
|---------------------------------------|--|------------------|
| Central wavelength                    | 1030 nm  | 1093 nm          |
| <b>FWHM</b>                           | < 100 kHz  |                  |
| Beam quality (M <sup>2</sup> )        | ≤ 1.05   |                  |
| Nominal output power                  | 1W, 5W, 15W  |                  |
| Power stability                       | < ± 1 %  |                  |
| RIN noise ( RIN peak - app. 0.3 MHz ) | RIN level - <-120 @ peak                                   |                  |
| Polarization                          | Random, Linear(optional)                                   |                  |
| Fast piezo tuning                     | available  |                  |
| Piezoelectric modulation frequency    | up to 10 kHz   |                  |
| Thermal tuning range                  | 250pm  |                  |
| Beam quality (M <sup>2</sup> )        | ≤ 1.05   |                  |
| Control interface                     | Front panel with display, RS232 (optional), USB (optional) |                  |
| Operating voltage                     | 220 -240 Volt, 50 Hz, Single Phase                         |                  |
| Operation temperature                 | 10 to 40 °C  |                  |
| Storage temperature                   | - 40 to +70 °C   |                  |
| MTBF                                  | > 10,000 Hrs   |                  |
| Operation Humidity                    | 10 - 85 %  |                  |
| Cooling                               | Forced air   |                  |
| Dimensions (WxHxL)                    | 449x139x359 mm   |                  |
| Weight                                | ≤ 12 kg  |                  |

- Optromix fiber systems can be customized especially by request.
- Optromix fiber systems are under 1 year warranty.



### Ordering Information

|              |                                 |     |   |
|--------------|---------------------------------|-----|---|
| Product Code | <b>Irybus-SF-10xx-X-yy-p-cc</b> | xx: | Wavelength (nm)   |
|              |                                 | yy: | Output power (W)  |
|              |                                 | p:  | Polarization: R - random, L - linear  |
|              |                                 | cc: | Optical connector: CM - collimator, FS - free space, FA = FC/APC FU = SC/UPC, SA = SC/APC SU = SC/UPC |

Information in this document is subject to change without notice.