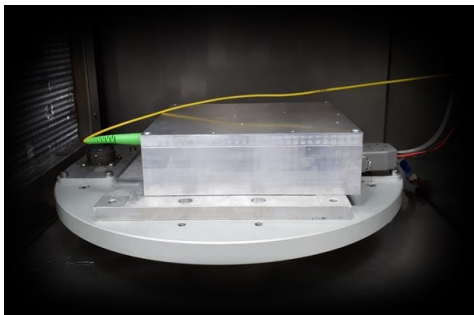


## Erbium doped superfluorescent fiber source



[www.lenlasers.com](http://www.lenlasers.com)

### Overview

Erbium doped source EDFS-1 can be easily integrated into high-precision testing systems or stands due to both the function of remote control for most of the output optical radiation parameters in real-time via a bi-directional serial port (COM port) and the possibility of power supply from a wide range of input DC voltages. A key feature of EDFS-1 is the high temperature stability of the output optical radiation parameters and their wide tuning range.

### Application

- Low-coherence interferometry;
- Fiber - optic physical quantum sensors;
- Optical coherence tomography;
- Researching (chromatic dispersion measurement and etc.);

### Key Features

- Hardware and software mode for stabilization of the output optical radiation parameters;
- Five modes to control output optical radiation parameters;
- Central wavelength tuning range in C-band (1530-1565 nm) more than 20 nm @ continuous output optical power;
- Tuning range for spectral width more than 7nm @ continuous output optical power;
- Temperature coefficient tuning of spectral width @ continuous output optical power;
- Tuning range for optical power from 0 to more than 60 mW.
- Use of domestic electronic element base is up to 90%.

### Technical Description

Parameter	Typ.value
Optical power	10 mW
Central wavelength tuning range at 25°C	1551 – 1574 nm
Spectral width tuning range at 25°C	11,5 – 18 nm
Operating temperature	- 30 - +50 °C
Temperature coefficient of central wavelength in stabilization mode	0,2 – 0,6 ppm/°C
Spectral width in central wavelength stabilization mode	12 nm
Residual polarization	< 0,1 %
DC power supply	18 – 36 V
Temperature dependent optical power variation	0,037 %/°C
Dimensions	125x35x150 mm
Fiber output	singlemode optical fiber SMF28 with connector FC/APC
Data transfer interface <sup>9</sup>	RS232
Package material	Aluminium