

# SuperK EVO

Industrial white light laser



## HIGH BRIGHTNESS OVER A WIDE SPECTRAL BANDWIDTH

**Ideal for optical device characterization and Test & Measurement**

The SuperK EVO is a range of cost-efficient white light lasers based on our extremely reliable fiber laser technology.

Designed for maintenance-free operation, the lasers are extremely stable, boast a long lifetime, and grant a low cost of ownership.

### Applications

- OCT
- Thin film
- General illumination
- Test & Measurement
- Inspection, sorting, and quality control
- Replacement of Superluminescent Emitting Diodes (SLEDs, SLDs)
- Characterizations of optical components and materials

# SUPERK EVO

## High brightness

The SuperK EVO has a very high brightness across the 500 - 2000 nm range.

## High repetition rate

With a high repetition rate of 20 MHz, the EVO is perfectly suited for Test & Measurement and optical device characterization.

## Graphical user interface and software development kit

If configured with colimated output, the SuperK EVO is compatible with all existing SuperK filters and accessories.

Get an utmost user-friendly operation through our NKT Photonics CONTROL software or a direct interface through the free software development kit.

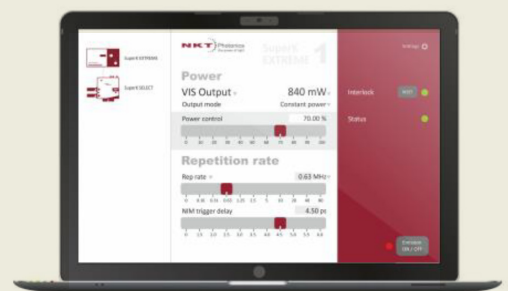
## Maintenance-free lifetime of thousands of hours

The solid-state, all-fiber architecture ensures a stable 24/7 operation and a maintenance-free lifetime of thousands of hours.

Intended for industrial use, its rugged and compact design make it easy to mount and handle.

## Features

- Versatile cost-efficient white light laser platform
- High brightness
- High repetition rate
- Robust and compact industrial design
- Free software development kit
- Plug and Play with all SuperK accessories
- Maintenance-free 24/7 operation
- Simple and intuitive user interface via NKT Photonics CONTROL



## Software

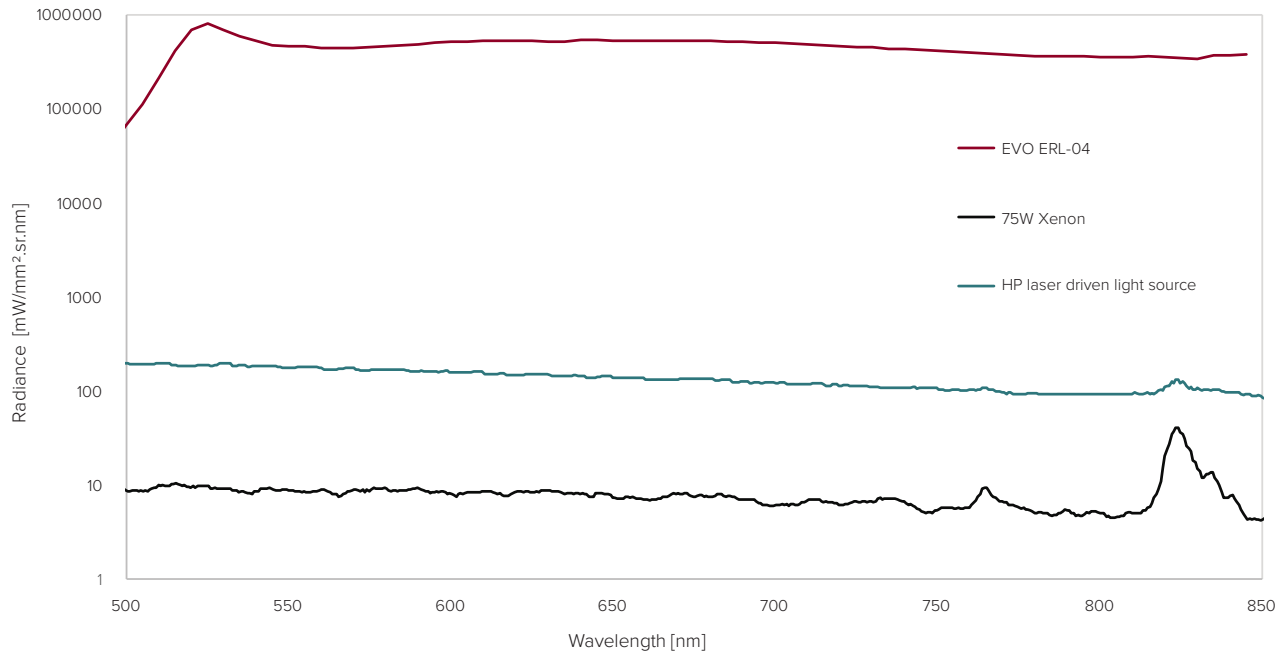
### — NKT Photonics CONTROL

Like other NKT Photonics lasers, the SuperK EVO can be controlled by our intuitive CONTROL software that gives easy access to all the functions in the laser.

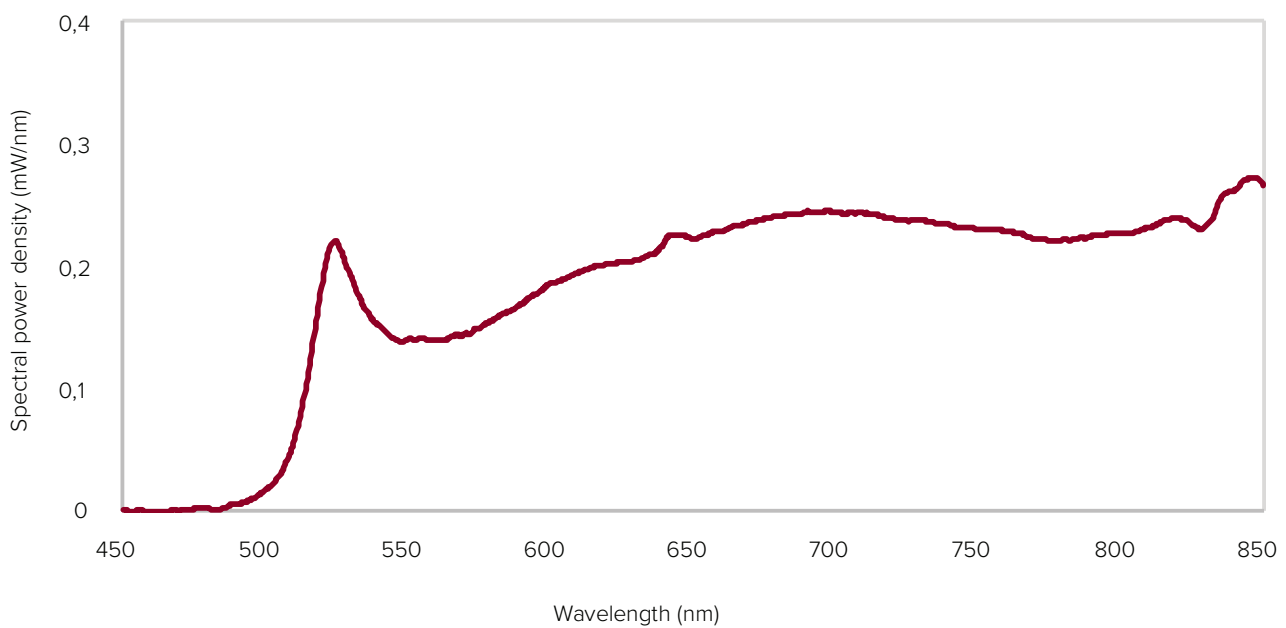
The software automatically detects all units attached to the computer. You can control the source and any filtering accessories from CONTROL. It is easy to use and supports touch input as well as traditional mouse+keyboard control.

# PERFORMANCE

## Spectral radiance



## Spectral power density



# SPECIFICATIONS

## Optical

Model	ERL-04
Repetition rate [MHz]	20
Spectral coverage [nm]	500 – 2000
Total power [mW]	200
Total visible power (350-850 nm) [mW]	40
Total power stability, RMS [%]	± 1
Cut-in wavelength [nm]	500
Polarization	Unpolarized
Beam quality, TEM <sub>00</sub>	M <sup>2</sup> < 1.1
Mode field diameter, FC/APC [μm]	≈ 3
Spot size @ 700 nm, collimated [mm]	1
Laser output	Gaussian, single mode
Fiber output	FC/APC or collimated

## Mechanical/Electrical

Model	ERL-04
Output fiber length [m]	1.5
Computer interface	USB 2.0
Sync (trigger) output	NIM
Power supply requirements [V DC]	24
Power consumption [W] <sup>1)</sup>	< 30
Door interlock connector <sup>2)</sup>	LEMO
External bus interface	15 D-Sub
Operation temperature [°C]	18 – 35
Storage temperature [°C]	-10 – 60
System cooling <sup>3)</sup>	Passive
Dimensions (WxHxL) [mm <sup>3</sup> ]	200 x 90 x 325
Weight [kg]	6

1) Power consumption is depending on the total output power.

2) SuperK EVO is a class 4 laser and required to be connected to a door interlock/circuit.

3) Heat radiation from the base plate.

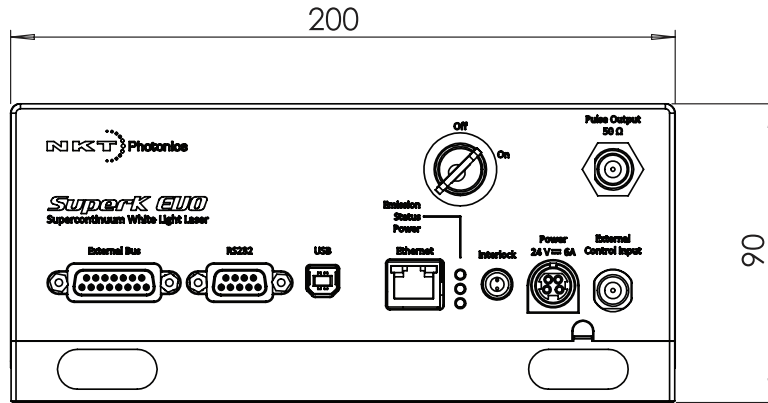
## Support and warranty

### Lifetime and service

Before shipping, all our SuperK lasers undergo a 96 hours burn-in to ensure performance and conformity to specifications.

Our systems boast over 10,000 hours of continuous lifetime and underlines the high reliability of our NKT Photonics Crystal Fibre technology.

# TECHNICAL DRAWINGS



All NKT Photonics products are produced under our quality management system certified in accordance with the ISO 9001:2015 standard.

