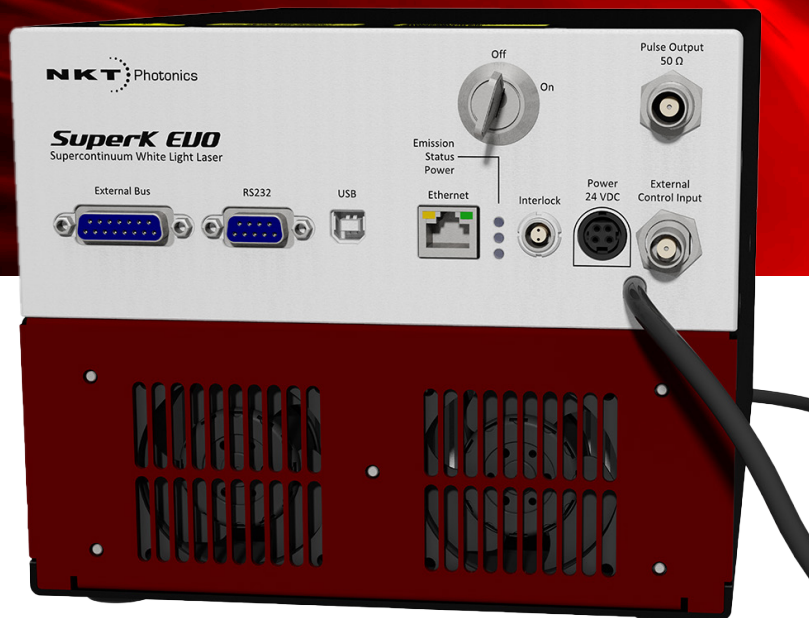


# SuperK EVO HP

High-power supercontinuum fiber laser platform



## HIGH POWER, HIGH REPETITION RATE AND NIM TRIGGER

### Ideal for Fluorescence-Lifetime Imaging Microscopy

The SuperK EVO EU-4 is a range of cost-efficient supercontinuum fiber lasers based on our extremely reliable supercontinuum technology and are designed for easy end-user control and maintenance-free operation.

With its NIM trigger and a repetition rate of 20 MHz, the EVO is perfectly suited for lifetime applications such as FLIM.

## Applications

- Microscopy
- Spectroscopy
- Industrial metrology
- Fluorescence lifetime imaging
- Optical inspection and imaging
- General illumination
- Characterizations of optical components and materials

# SUPERK EVO HP

## Cost-efficient, reliable, and maintenance-free

The high-power SuperK EVO is a range of cost-efficient supercontinuum fiber lasers based on our extremely reliable supercontinuum technology and are designed for easy end-user control and maintenance-free operation.

## NIM trigger and high repetition rate

With its NIM trigger and a repetition rate of 20 MHz, the EVO is perfectly suited for lifetime applications such as FLIM.

The output spectrum covers 410-2400 nm and comes fiber-delivered through a broadband collimator.

## Graphical user interface and software development kit

The SuperK EVO is compatible with all existing SuperK filters and accessories. 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 all-fiber architecture ensures a stable 24/7 operation and a maintenance-free lifetime of thousands of hours backed by our 2-year warranty.

## OEM version available

For OEM integration, a smaller version is available upon request. Contact your Sales Manager for information on our capabilities.

Model	EU-4	EVO OEM
Repetition rate	20 MHz	20-320 MHz
Spectral coverage	410-2400 nm	400-2400 nm
Total power	≈ 2 W	1-10 W
Visible power	400 mW	-
Power stability	± 1.0 %	± 1.0 %

## Features

- Versatile cost-efficient supercontinuum platform
- Robust and compact industrial design
- Benchtop and OEM models
- Flexible cooling solutions for OEM models: Air or water
- Free software development kit
- Simple and intuitive user interface via NKT Photonics CONTROL
- Plug and Play with all SuperK accessories
- Maintenance-free 24/7 operation

# SPECIFICATIONS

## Optical

Model	EU-4
Repetition rate [MHz]	20
Spectral coverage [nm]	410 – 2400
Total power [W]	≈ 2
Total visible power (350-850 nm) [W]	0.40
Total power stability [%]	± 1
Cut-in wavelength [nm]	410
Polarization	Random
Beam quality, TEM <sub>00</sub> <sup>1)</sup>	M <sup>2</sup> < 1.1
Beam diameter [mm]	≈ 1 @ 532 nm ≈ 2 @ 1100 nm ≈ 3 @ 2000 nm
Spot size @ 700 nm, collimated [mm]	1

## Mechanical/Electrical

Model	EU-4
Laser output	Gaussian, single mode
Output fiber length [m]	1.5
Computer interface	USB 2.0/RS-232/Ethernet
Sync (trigger) output	NIM
Power supply requirements [V DC]	24
Power consumption [W] <sup>2)</sup>	Up to 60
Door interlock connector <sup>3)</sup>	2-pin LEMO
External bus interface	15 D-sub
Operation temperature [°C]	18 – 30
Storage temperature [°C]	-10 – 55
System cooling	Air <sup>4)</sup> or water
Dimensions (WxHxL) [mm]	200 x 166.5 x 325
Weight [kg]	12

1) > 450 nm.

2) Power consumption depends on the total output power.

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

4) Internat fan at a minimum airflow of 80 m<sup>3</sup>/hour is needed.



## 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 laser functions.

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.

## Support and warranty

### SuperK warranty

All SuperK EVO products comes with industry leading reliability and are backed by our standard 2 year warranty.

### Lifetime and service

Before shipping, all our SuperK lasers undergo an extensive 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.

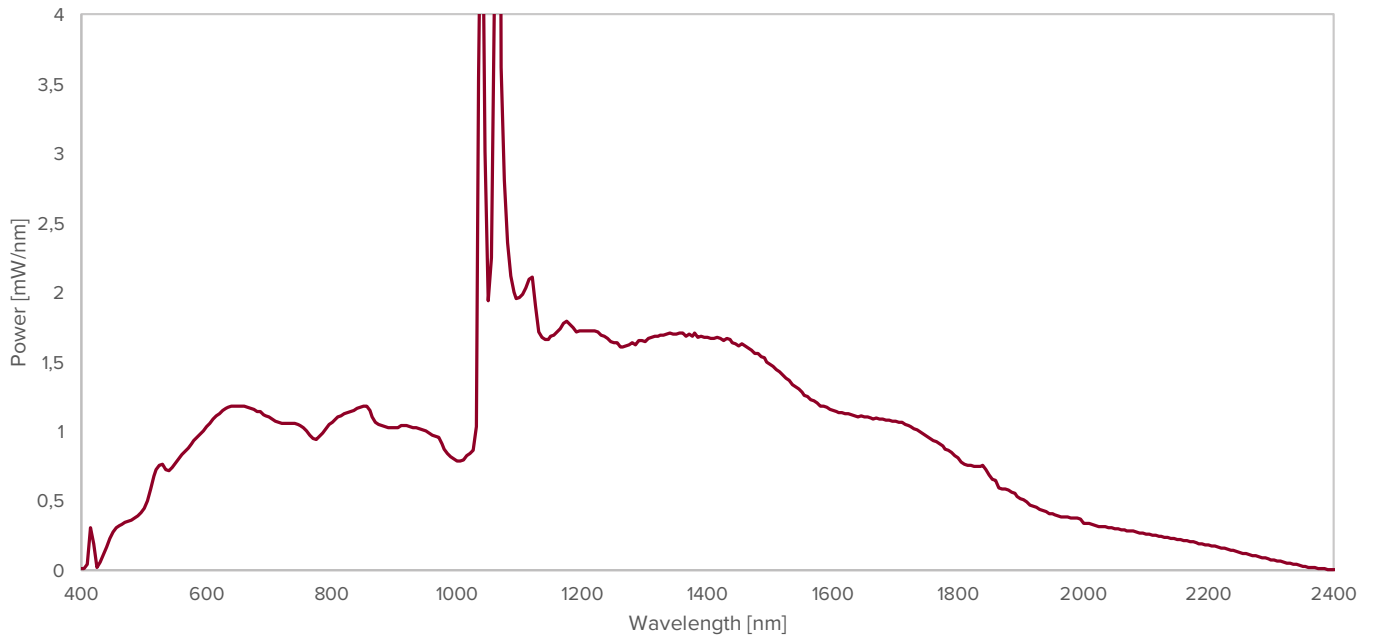
### Maintenance-free in the entire lifetime

A SuperK laser is completely maintenance-free in the entire lifetime.

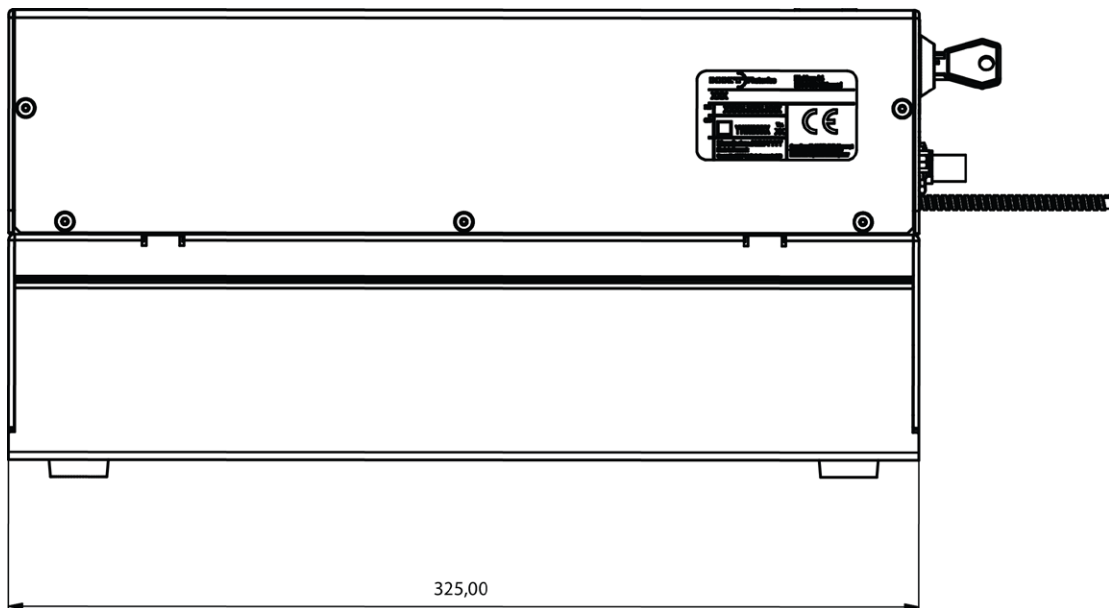
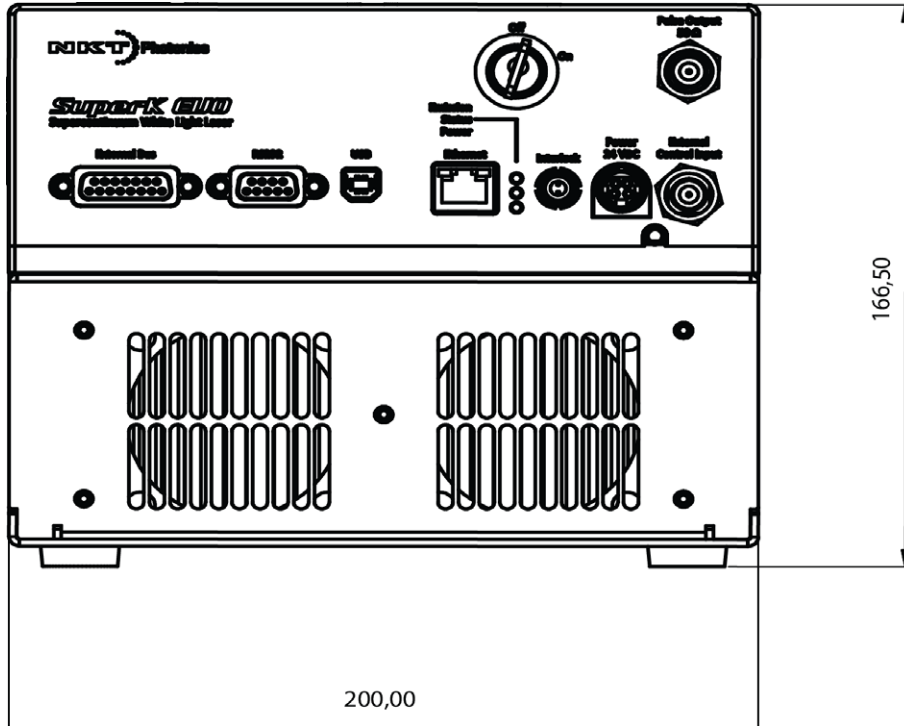
Should your laser be damaged, the modular platform ensures fast turnaround on service and repairs. Typically, it takes four weeks or less to get your laser back.

# PERFORMANCE

## Typical output spectrum



# TECHNICAL DRAWINGS



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

