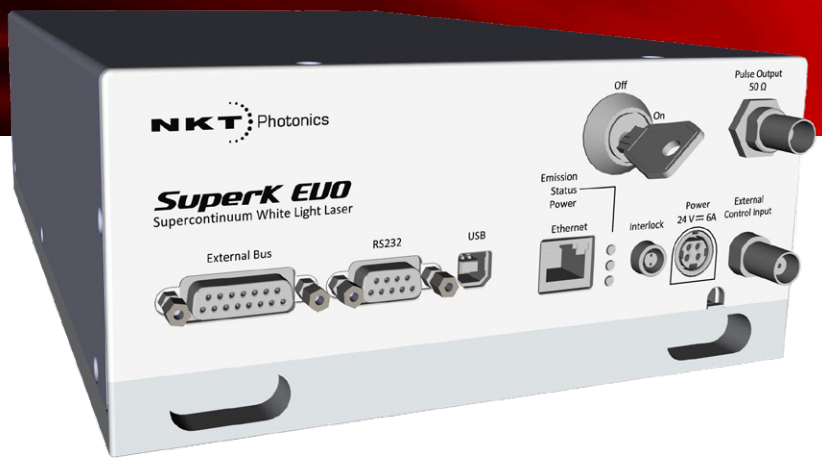
SuperK EVO

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

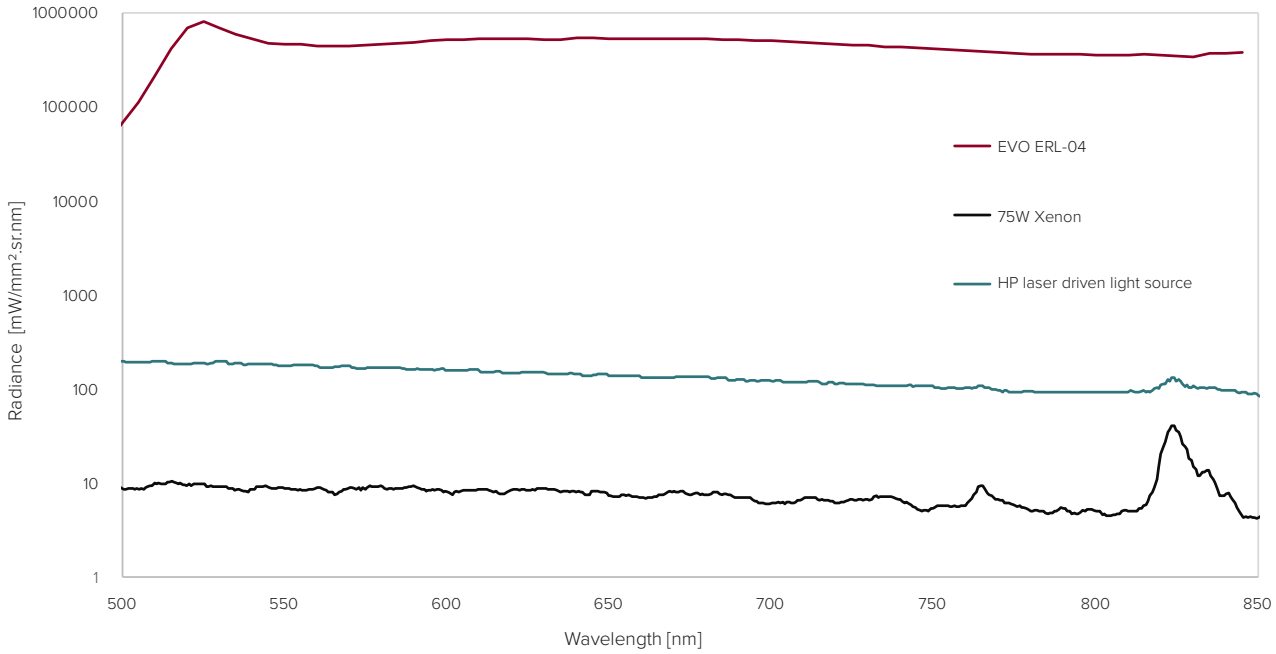
- Versatile cost-efficient white light laser platform
- High brightness
- High repetition rate
- Robust and compact industrial design
- Free software development kit
- Plug and Play with all SuperK accessories
- Maintenance-free 24/7 operation
- Simple and intuitive user interface via NKT Photonics CONTROL

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 laser functions.

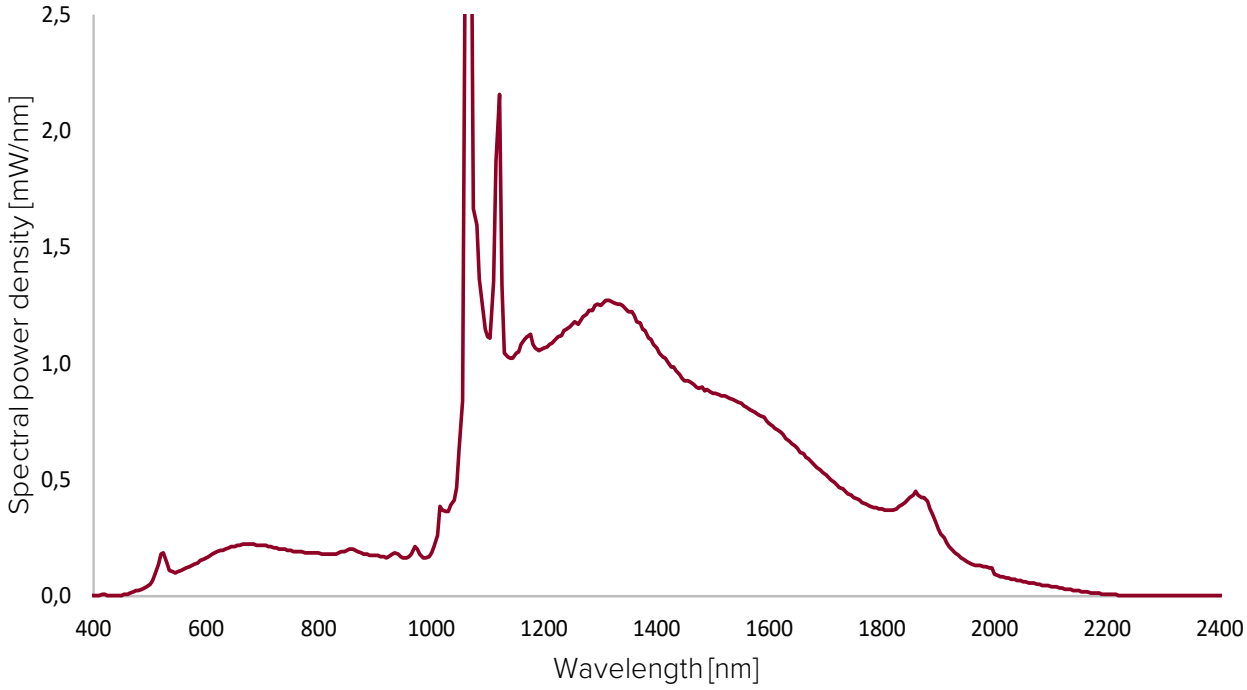
The software automatically detects all units attached to the computer. You can control the source and any filtering accessories from CONTROL. It is easy to use and supports touch input as well as traditional mouse+keybord control.

PERFORMANCE

Spectral radiance



Spectral power density



SPECIFICATIONS

Optical

Model	ERL-04
Repetition rate [MHz]	20
Spectral coverage [nm]	500 – 2000
Total power [W]	≈ 1
Total visible power (350-850 nm) [mW]	> 40
Total power stability, RMS [%]	± 1
Cut-in wavelength [nm]	500
Polarization	Random
Beam quality, TEM_{00} [1]	$M^2 < 1.1$
Mode field diameter, FC/APC [µm]	≈ 3
Beam diameter [nm]	≈ 1 @ 532 nm ≈ 2 @ 1100 nm ≈ 3 @ 2000 nm
Spot size @ 700 nm, collimated [mm]	1

Mechanical/Electrical

Model	ERL-04
Laser output	Gaussian, single-mode
Fiber output	FC/APC or collimated
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] [2]	< 30
Door interlock connector [3]	2-pin LEMO
External bus interface	15 D-Sub
Operation temperature [°C]	18 – 35
Storage temperature [°C]	-10 – 60
System cooling [4]	Passive
Dimensions (WxHxL) [mm]	200 x 90 x 325
Weight [kg]	6

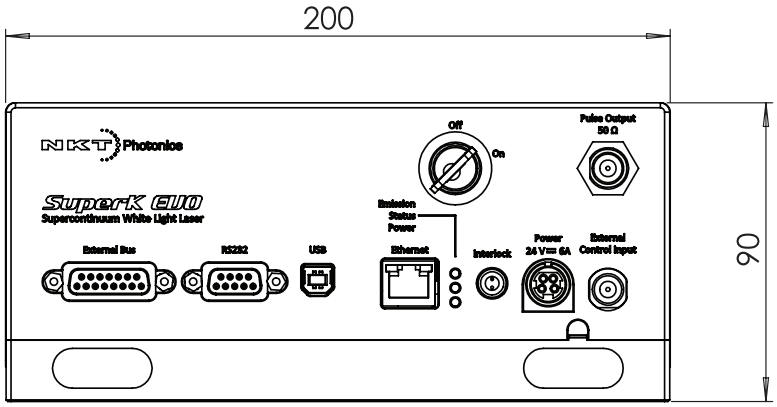
1) > 450 nm
2) Power consumption is depending on the total output power.
3) SuperK EVO is a class 4 laser and required to be connected to a door interlock/circuit.
4) Heat radiation from the base plate.

Support and 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.

TECHNICAL DRAWINGS



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

FORCE Certification
Systemcertificering
DS/EN ISO 9001 - Kvalitet