

Cyclone

Broad Bandwidth Fiber Laser with Extremely Short Femtosecond Pulses

The Cyclone is a broad bandwidth femtosecond fiber laser. It provides the shortest pulses on the market generated by a fiber laser, less than 25 fs pulses. Cyclone provides outstanding peak power ($> 75 \text{ kW}$) over a wide spectrum of 950-1150 nm.

It is a cost-effective, maintenance-free femtosecond fiber laser with best-in-class performance.

These parameters allow for increased brightness and reduced photodamage, making the Cyclone laser perfect for multiphoton microscopy, SHG microscopy and a variety of other non-linear processing and spectroscopy applications.

Optical Peak Power

$> 75 \text{ kW}^*$

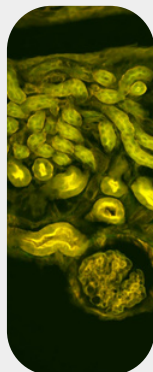
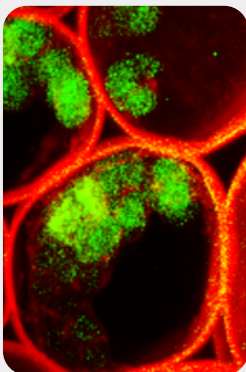
Spectral Range

950-1150 nm

Pulse Duration

$< 25 \text{ fs}^*$

/ Applications



Two-photon microscopy

SHG microscopy

Non-linear processing and spectroscopy



*Values of the compressor output

Cyclone

/ Technical Specifications

Spectral Range:

950-1150 nm

Optical Peak Power:

> 75 kW*

Pulse Duration:

< 25 fs*

Repetition Rate:

80 MHz*

Power Stability:

<0.5% over 3 h (std. dev.)

Average Power:

>150 mW*

Polarization:

Unpolarized

Output Port:

Free space

Optical Output:

Collimated, single-mode across full spectrum

Beam Diameter:

2.4 mm (1/e² at 1064 nm)

Spatial Mode Quality (M²):

< 1.2

Cooling:

Thermoelectric cooler + air cooling

Dispersion Pre-Compensation:

-4000 fs to +2500 fs

Power Requirements:

220 V / 110V - 50/60 Hz

Operating Temperature:

20 - 30 °C

Storage Temperature:

0 - 60 °C

Dimensions:

436x560x151 (WxDxH)

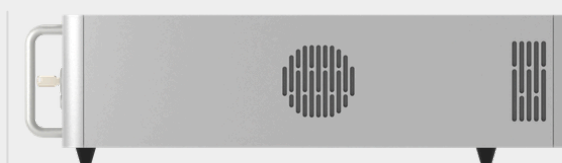
Control Software:

User-friendly



436 mm

151 mm



560 mm

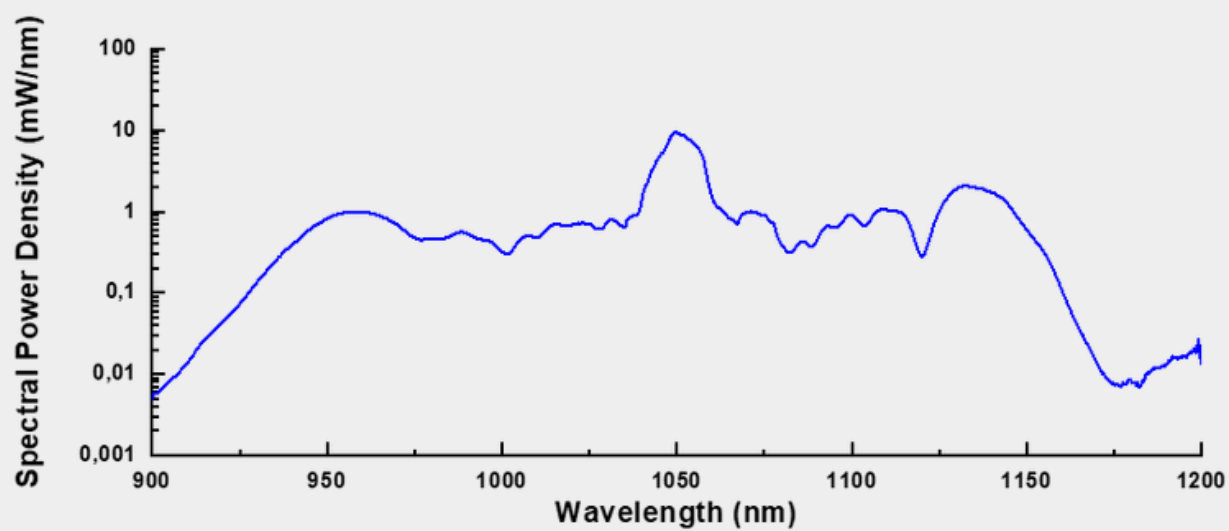
*Values of the compressor output

OTHER DETAILED SPECS UNDER REQUEST

Rev. 01

Cyclone

/ Optical Spectrum



Cyclone

/ Additional information



Laser Security:

This product is a Class 3B laser.

Appropriate safety measures according to such laser class should be taken in its installation and use.

Warranty:

12 months warranty.

Extended warranty on request.

/ FYLA contact

Sales contact

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