Horizon V2

Supercontinuum Fiber Laser with Ultra Flat Spectrum

The Horizon Supercontinuum Fiber Laser is a cutting-edge optical source designed to redefine performance in spectroscopy and imaging. With an ultra-flat spectrum, free of spurious spectral peaks, it spans an impressive spectral range of 450 and 2300 nm.

With its spatial coherence, broad spectral coverage and spectral flatness, Horizon outperforms traditional light sources.

Ideal for advanced scientific and industrial applications, including fluorescence lifetime imaging and beyond, where consistent, high-quality illumination is critical. Whether in research or industrial environments, Horizon empowers users with a robust, high-performance solution for their optical needs.

Spectral Range
410 - 2300 nm

Average Power
≥ 4 W

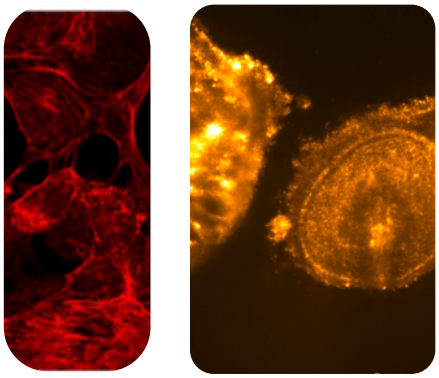
Visible Range (410-850 nm) Average Power:
≥ 300 mW

/ Highlights

Ultra Flat Spectrum

Outstanding Power Stability

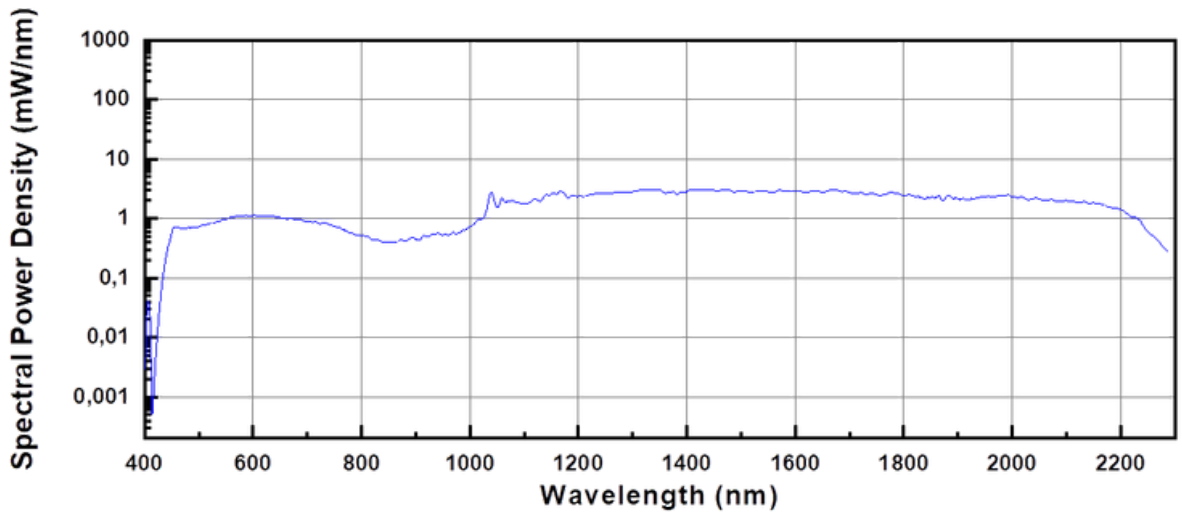
/ Applications



- Microscopy
- Fluorescence-lifetime imaging microscopy (FLIM)
- Time-correlated single-photon counting (TCSPC)
- FRET imaging
- Lifetime measurement

Horizon V2

/ Typical Optical Spectrum



/ Accessories

Tunable Visible Range

BOREAL and BOREAL NIR are the accessories for supercontinuum lasers to choose any wavelength.

The perfect white laser plug-in accessory for bioimaging, nanophotonic and more.

Spectral Range:
400* - 1000 nm / 1000 - 1700 nm
Optical Output:
Free space or Fibre output (1 m) (Collimated output customizable)
Bandwidth:
10 - 600 nm
Simultaneous selectable band:
1
Resolution:
1 nm
Insertion losses (full bandwidth):
≤ 10 % (free space output)
≤ 30 % (Multimode fibre output)
≤ 60 % (Single-mode fibre output)

* Initial wavelength depends on the supercontinuum source

Horizon V2

/ Technical Specifications

Spectral Range:
410 - 2300 nm

Average Power:
≥ 4 W

Visible Range (410-850 nm)
Average Power: ≥ 300 mW

Pulse Repetition Rate:	80 ± 2 MHz
Power Stability:	≤ 0.5 % (std. dev.)
Pulse Duration:	≤ 10 ps @ 1060 nm | ≤ 250 ps full spectrum*
Polarization:	Unpolarized
Output Port:	Single Mode Fiber. 1 m length (customizable)
Optical Output:	Collimated (in the range 450 - 1000 nm) Single-mode across full spectrum
Synchronization / Connections:	TTL (SMA)
Beam Diameter @ 1 m of distance:	@ 470 nm ≤ 2 mm / @ 580 nm ≤ 2.5 mm / @ 725 nm ≤ 3.5 mm / @ 1150 nm ≤ 5.5 mm
Spatial Mode Quality (M^2):	≤ 1.2
Cooling:	Thermoelectric cooler + air cooling
Power Requirements:	110V - 220 V / 50 Hz-60 Hz
Operating Temperature:	20 - 30 ºC
Storage Temperature:	0 - 60 ºC
Dimensions:	436x560x151 (WxDxH)
Control:	Manual / Sotfware via USB
Safety Connections:	Interlock / Key

*Estimated value

OTHER DETAILED SPECS UNDER REQUEST

Rev. 03

Horizon V2

Supercontinuum Fiber Laser with Ultra Flat Spectrum

/ Additional information

Laser Safety:

This product is a Class 4 laser.

CAUTION – VISIBLE AND INVISIBLE LASER RADIATION! AVOID EYE AND SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION.

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

Warranty:

12 months warranty.

Extended warranty on request.

CE

/ FYLA contact

Sales contact

sales@fyla.com

+34 607 97 10 21