

Horizon

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

450-2300 nm

Average Power

> 3 W

Visible Range (450-750 nm)

Average Power:

≥ 250 mW

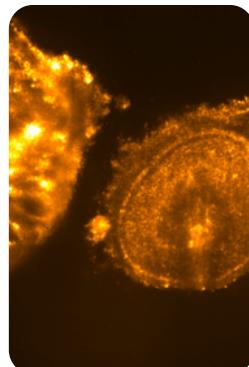
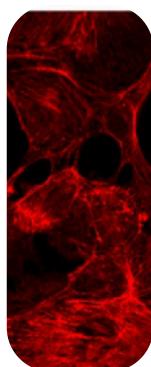
/ Highlights

Ultra Flat Spectrum

Outstanding Power Stability



/ Applications



Microscopy

Fluorescence-lifetime imaging microscopy (FLIM)

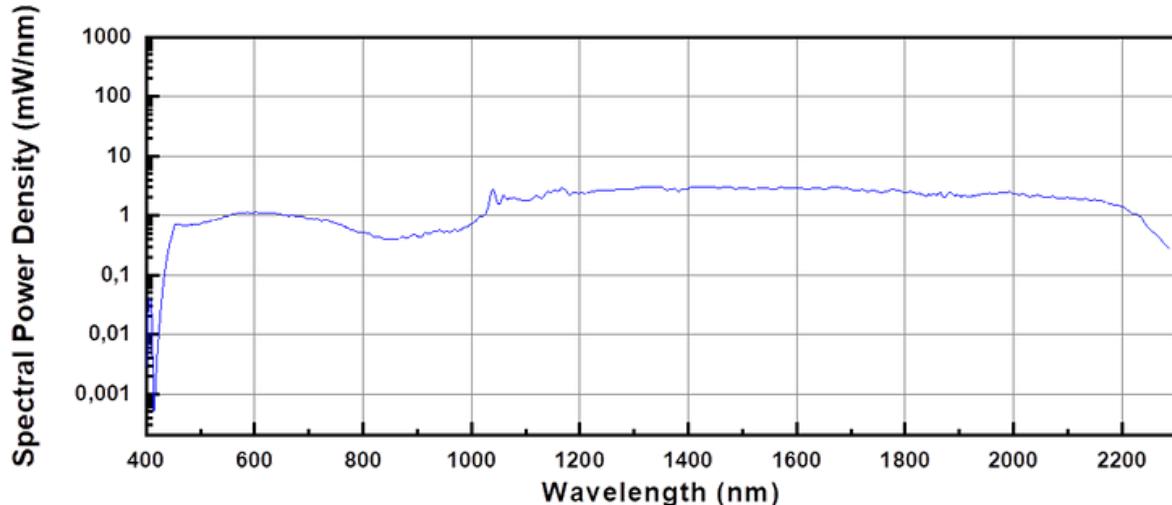
Time-correlated single-photon counting (TCSPC)

FRET imaging

Lifetime measurement

Horizon

/ Typical Optical Spectrum



/ Accessories

Tunable Visible Range

BOREAL is the accessory for supercontinuum lasers to choose any wavelength in the visible range.

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

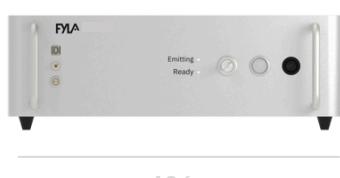


Spectral Range:
450-750 nm
Optical Output:
Free Space or Multimode Fiber Output (1m) with FC/PC connector (FC/APC and Collimated output customizable)
Linewidth:
10 nm to 300 nm
Selectable lines:
1
Resolution:
1 nm
Power Transmissions:
>75% (free space output) / > 25% (fiber output)

Horizon

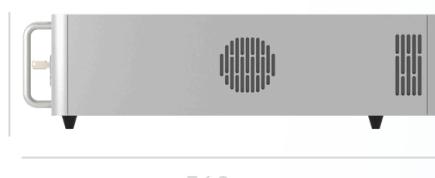
/ Technical Specifications

Spectral Range: 450-2300 nm	Average Power: > 3 W	Visible Range (450-750 nm) Average Power: ≥ 250 mW
Pulse Repetition Rate:	80 MHz	
Power Stability:	$\leq 0,5$ % (std. dev.)	
Pulse Duration:	< 10 ps @ 1060 nm < 200 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) ; NIM (SMA) Under request	
Beam Diameter @ 1 m of distance:	$@ 470$ nm ≤ 2 mm / $@ 580$ nm $\leq 2,5$ mm / $@ 725$ nm $\leq 3,5$ mm / $@ 1150$ nm $\leq 5,5$ 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 °C	
Storage Temperature:	0 - 60 °C	
Dimensions:	436x560x151 (WxDxH)	
Control:	Manual / Software via USB	
Safety Connections:	Interlock / Key	



151 mm

436 mm



560 mm

*Estimated value

Horizon

/ 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 + 12 months of commercial warranty or > 10,000h of continuous operation.
Extended warranty on request.



/ FYLA contact

Sales contact

sales@fyla.com

+34 607 97 10 21