Iceblink PRO V1

Supercontinuum Fiber Laser with Variable Frequency

This supercontinuum fiber laser spans a spectral range of 450-2300 nm and is equipped with a pulse picker for enhanced control.

The pulse picker enables users to select specific laser pulses, allowing for adjustable repetition rates and tailored light output.

This feature makes the Iceblink with variable frequency ideal for precise, time-sensitive applications. Its spatial coherence and broad spectrum makes it a strong alternative to traditional lamps, single-line lasers, LEDs, and ASE sources, supporting scientific and industrial uses like fluorescence lifetime imaging, time-resolved spectroscopy and other.

Spectral Range
410* - 2300 nm

Average Power
≥ 2 W @ 40 MHz (fundamental frequency)

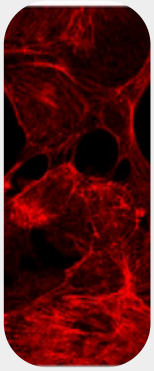
Tunable Pulse Repetition Rate: **
40 / 20 / 10 / 5 / 2.5 / 1 MHz / 500kHz***

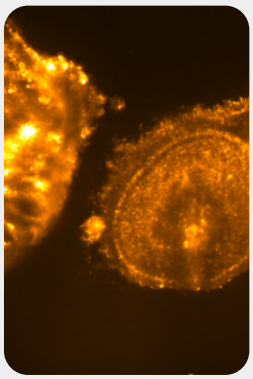
/ Highlights

Adjustable Repetition Rate

Outstanding Power Stability

/ Applications





Microscopy

Fluorescence-lifetime imaging microscopy (FLIM)

Time-correlated single-photon counting (TCSPC)

FRET imaging

Lifetime measurement

**Other values under request ***Minimun frequency *****Estimated value

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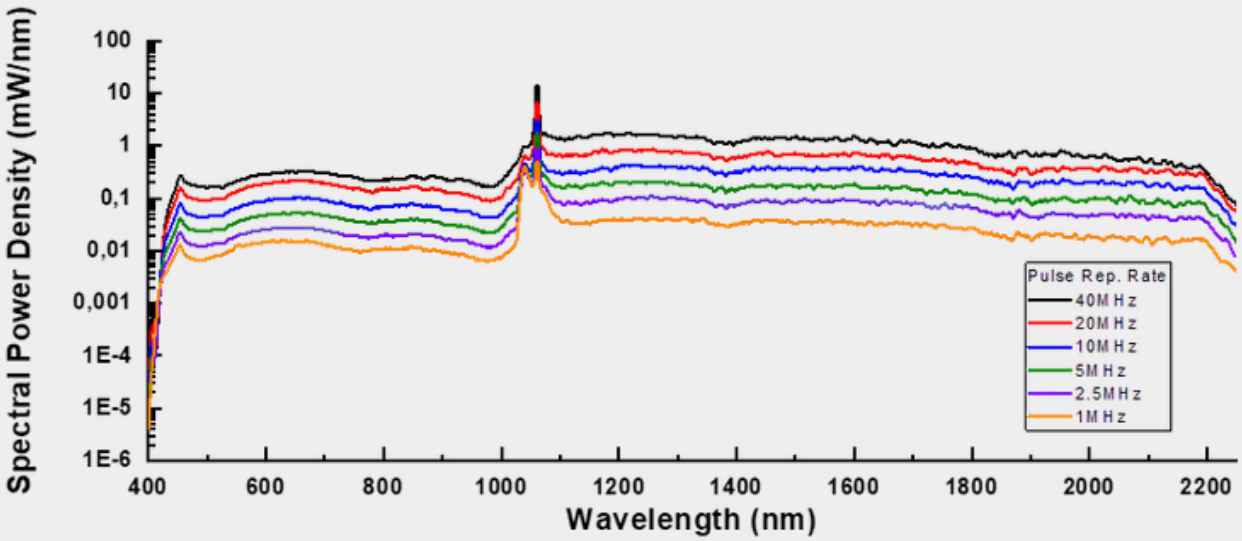
/ Typical optical spectrum @ different pulse repetition rates



/ 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

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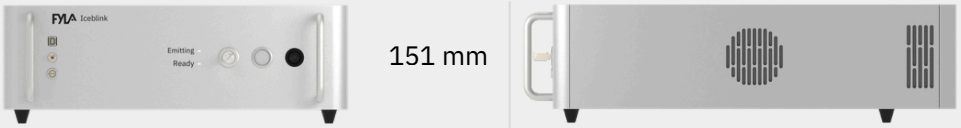
/ Technical Specifications

Spectral Range:	Average Power:	Tunable Pulse Repetition Rate: **
410* - 2300 nm	> 2 W @ 40 MHz	40 / 20 / 10 / 5 / 2.5 / 1 MHz / 500kHz***

Pulse Duration:	≤ 10 ps (@ 1060 nm) | ≤ 250 ps full spectrum****
Power Stability:	≤ 0.5 % (std. dev.)
Visible Range Average Power (410-850 nm):	≥ 150 mW @ 40 MHz
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 / Software via USB
Safety Connections:	Interlock / Key



436 mm 560 mm

*Customizable **Other values under request ***Minimun frequency *****Estimated value

OTHER DETAILED SPECS UNDER REQUEST

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/ 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

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