Inspire™ Blue

AUTOMATED FREQUENCY DOUBLER FOR Ti:SAPPHIRE LASERS

The Inspire Blue Advantage

- Femtosecond and picosecond versions
- Highest conversion efficiency
- Excellent beam quality
- Broad wavelength coverage with a single set of optics
- Simultaneous IR and UV output

APPLICATIONS

- Non-linear spectroscopy
- Quantum optics
- Biochemistry
- Biophotonics

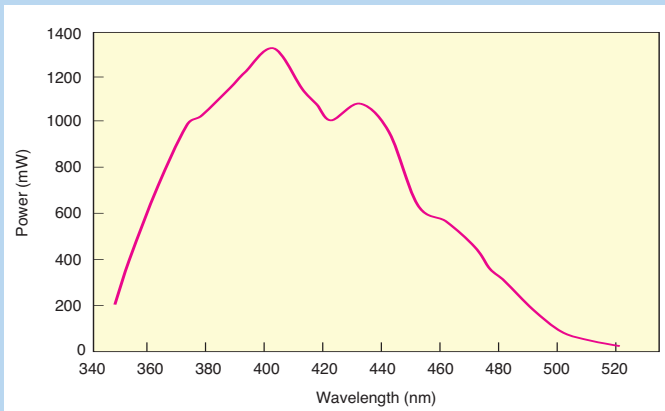
The Spectra-Physics® Inspire™ Blue is an innovative, easy to use and reliable doubling unit that efficiently converts the IR emission of Ti:Sapphire lasers (690–1040 nm) into the near-UV and visible wavelength range (345–520 nm).

Based on novel nonlinear technology, the Inspire Blue doubler provides exceptional beam quality, high conversion efficiency and reduced pulse broadening. The unit is available in both manual and automated versions and is compatible with the Spectra-Physics Mai Tai® HP femtosecond output as well as the Spectra-Physics Tsunami® HP femtosecond and picosecond outputs.

The Inspire Blue doubler also features synchronized outputs–the converted output in the near-UV and visible wavelength range (345–520 nm) and the unconverted fundamental output in the IR range (690–1040 nm)–enabling use of both beams in simultaneous experiments. Complete wavelength coverage is achieved with a single optics set to increase flexibility.

The Inspire Blue doubling unit is an excellent tool for a wide range of applications requiring femtosecond light pulses at MHz repetition rates.

Typical Performance with Mai Tai HP



Spectra-Physics®
A Newport Corporation Brand

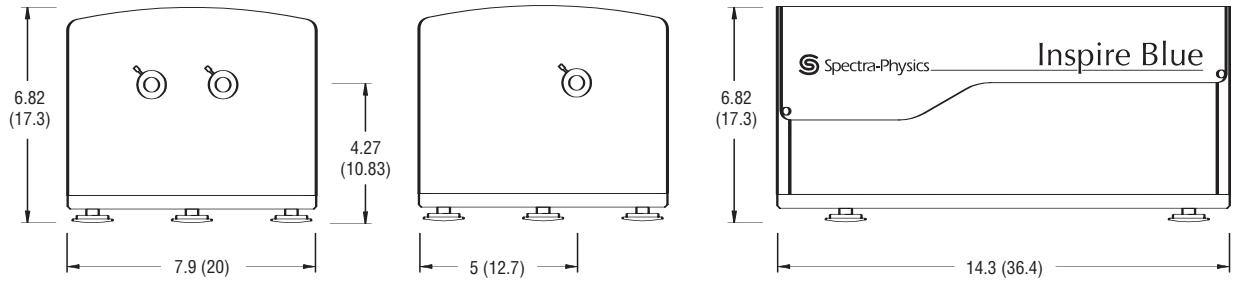
Inspire™ Blue

Specifications

Output Characteristics[1]	Inspire Blue
Pulse Width	<150 fs @ 860 nm (95 fs pump pulse)
Tuning Range[2]	345–520 nm
Conversion Efficiency	45% @ 820 nm (2.5 W pump power)
Repetition Rate	80 MHz
Spatial Mode	Gaussian (TEM_{00})
Tuning Mechanism	Angle rotation
Operation	Manual and Fully Automated versions
Dimensions (W x L x H)	7.9 x 14.3 x 6.1 in (200 x 364 x 155 mm)

1. When pumped by Spectra-Physics Mai Tai HP
2. Up to 540 nm when pumped by Spectra-Physics Tsunami HP

Inspire Blue Dimensions



Output End View **Input End View** **Side View**

Dimensions in inches (mm)

Manufactured by Radiantis

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www.newport.com/spectra-physics

3635 Peterson Way, Santa Clara, CA 95054, USA
PHONE: 1-800-775-5273 1-408-980-4300 FAX: 1-408-980-6923 EMAIL: sales@spectra-physics.com
Complete listings for all global office locations are available online at www.newport.com/contact

	PHONE	EMAIL		PHONE	EMAIL
Belgium	+32-(0)0800-11 257	belgium@newport.com	Irvine, CA, USA	+1-800-222-6440	sales@newport.com
China	+86-10-6267-0065	china@newport.com	Netherlands	+31-(0)30 6592111	netherlands@newport.com
France	+33-(0)1-60-91-68-68	france@newport.com	United Kingdom	+44-1235-432-710	uk@newport.com
Japan	+81-3-3794-5511	spectra-physics@splasers.co.jp	Germany / Austria / Switzerland	+49-(0)6151-708-0	germany@newport.com
Taiwan	+886 -(0)2-2508-4977	sales@newport.com.tw			

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