ORIA BLUE FEMTOSECOND AND PICOSECOND HARMONIC GENERATOR

Product： ORIA BLUE FEMTOSECOND AND PICOSECOND HARMONIC GENERATOR

Key Features

- Highest Conversion Efficiency
- Femtosecond and Picosecond Operation
- Broad Wavelength Coverage with a Single Set of Optics
- Excellent Beam Quality
- Simultaneous IR and UV Outputs
- Automated Hands-Free and Manual Versions
- Compatible with Standard Femtosecond and Picosecond Ti:Sapphire oscillators

Description

A femtosecond and picosecond SHG module which converts the IR Ti:sapphire wavelengths, across 680 – 1080 nm (9259 – 14705 cm-1), into the UV, across 340 – 550 nm (18181 – 29411 cm-1).
Based on novel nonlinear technology, the Oria Blue offers exceptional conversion efficiency (>45 %) in both femtosecond and picosecond regimes. With reduced pulse broadening and superior spectral and spatial beam quality, this compact doubling unit provides an excellent tool for a wide range of applications requiring femtosecond and picosecond light pulses at MHz repetition rates.

The Oria Blue is available in both manual and automated versions, offering alignment-free installation and simple and reliable operation. The automated Oria Blue advanced control software ensures fast and reliable tuning while providing a selection of practical operating features.

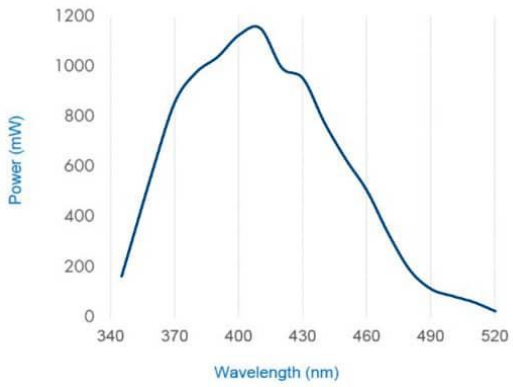
This doubling unit is designed to be pumped by all standard ultrafast MHz repetition-rate Ti:sapphire oscillators.

Specifications

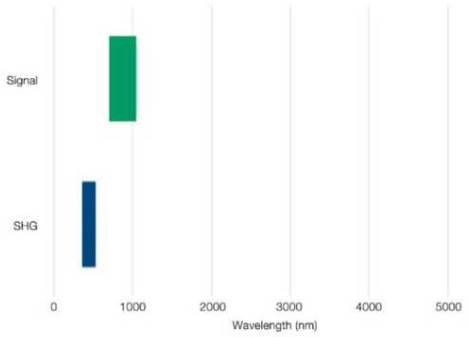
Output Characteristics	Pumped with Ti:Sapphire oscillator, 2.8 W, 80 MHz, 90 fs [690 – 1040 nm (9615 – 14492 cm-1)]	Pumped with Ti:Sapphire oscillator, 3.3 W, 80 MHz, 140 fs [680 – 1080 nm (9259 – 14705 cm-1)]
Tuning Range	345 – 520 nm (19230 – 28985 cm-1)	340 – 550 nm (18181 – 29411 cm-1)
Average Power	> 1.2 W at 410 nm (24390 cm-1)	> 1.2 W at 410 nm (24390 cm-1)
Pulse Width	< 150 fs at 860 nm (11627 cm-1)	< 180 fs at 860 nm (11627 cm-1)
Spatial Mode	TEM00	TEM00
Repetition Rate	80 MHz	80 MHz
Operation	Manual and fully automated versions	Manual and fully automated versions
Size (W x L x H)	200 x 364 x 155 mm (7.9 x 14.3 x 6.1 inch)	200 x 364 x 155 mm (7.9 x 14.3 x 6.1 inch)

Performance charts

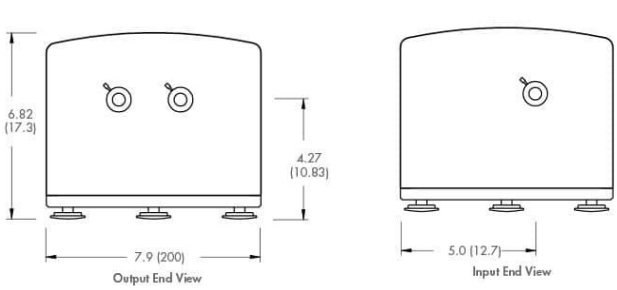
Oria Blue Typical Tuning Curve



Oria Blue Wavelength Coverage

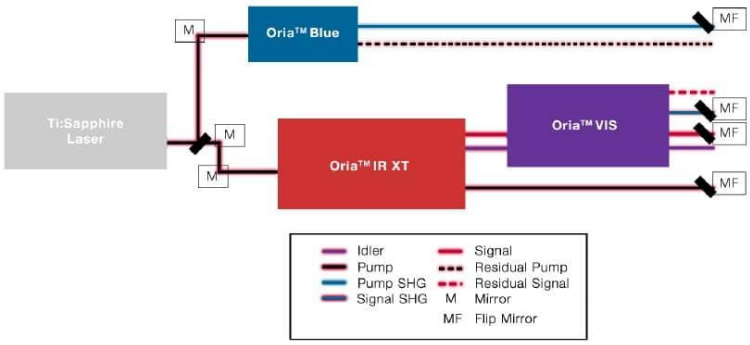


Dimensions

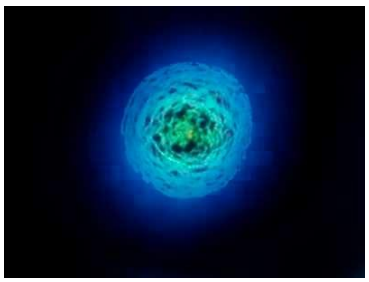


Related products

(IR OPO, Oria VIS and Oria Blue)



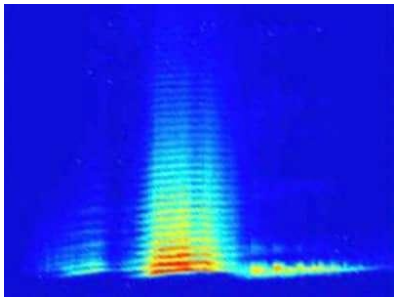
Applications



Biophotonics

Biochemistry

Quantum optics



Nonlinear spectroscopy