

ECD-X

Ultracompact, Highly Efficient, Resonant Frequency Doubler



Features

- Highly efficient resonant doubling of CW input light
- Highly stable lock to fundamental using up to date DSP electronics
- Automatic tracking of fundamental frequency scans
- No need to change optics (internal or external) - single optics set for Ti:S fundamental range
- Wavelength flexibility with easily exchanged doubling crystals
- Simple integration with SolsTiS
- Options for tripling, quadrupling and mixing

Specifications

Doubling Efficiency ^{[1][2][3][4]}	6% for fundamental power 100 - 300 mW 10% for fundamental power 300 - 600 mW 15% for fundamental power 600-1000 mW 22% for fundamental power >1 W
Continuous Scan Range	> 40 GHz
Relative Intensity Noise	<0.5% ^[5]
Beam Quality	TEM ₀₀ M ² <1.2

Tuning Range	700 - 1000nm ^[7]		
Optics ^[6]			
Crystals ^[8]			
Fundamental Wavelength [nm]	700	800	900
Typical Tuning Range [nm] ^[9]	+/- 15	+/- 25	+/- 30

Environmental Requirements

Operating temperature range:	16-30°C
Max. relative humidity:	80% non-condensing, up to 30°C
Mounting surface:	Optical table
Laboratory:	Air free of dust (laminar air flow box recommended)

Notes

1. Up to a maximum output power of 950mW. Please enquire for higher power options
2. ECD-X output power calculated using specified fundamental power
3. Specified at center wavelength of SHG crystal
4. Specified for SolsTiS fundamental Ti:S
5. In addition to fundamental noise
6. Single optics set, no exchange of mirror set required (700-1000 nm)
7. Please enquire for other wavelengths
8. Examples only, crystals are cut for customer specified wavelength
9. Typical tuning range corresponds to 50% efficiency compared to peak

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A complete list of our global locations is available on our website.

M Squared Laser's laser products are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Centre of Devices and Radiological Health on all systems ordered for shipment after October 1st, 2003.

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