SolsTiS ECD-X

DATASHEET

CW Tunable UV Visible

UV & VISIBLE SHG CAVITY

M SQUARED

SolsTiS ECD-X

SolsTiS ECD-X is a compact frequency conversion module that extends the range of SolsTiS output wavelengths via frequency doubling in a resonant cavity with optimised conversion efficiency.

APPLICATIONS

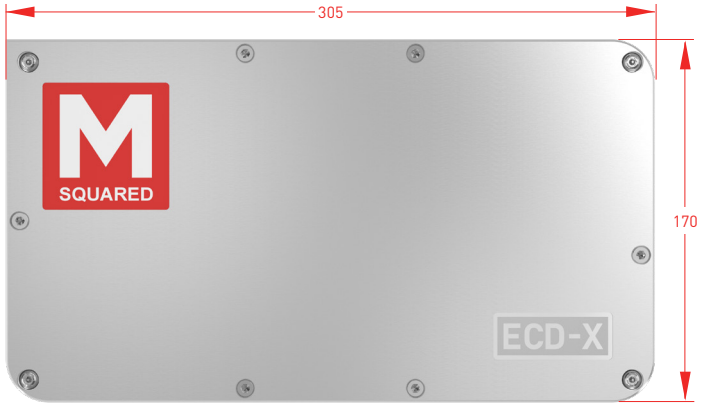
- Atom/Ion Trapping and Cooling
- High-Resolution Spectroscopy
- Optical Lattices
- Quantum Emitters
- Resonance Raman Spectroscopy
- Excitons-polaritons

MODEL OPTIONS

- Manual tuning
- Automatic tuning
- Fixed wavelength

FEATURES

- Highly efficient resonant doubling of CW input light
- Highly stable lock to fundamental using sophisticated DSP electronics
- Automatic tracking of fundamental frequency scans
- No need to change optics (internal or external) - single optics set for Ti:Sa 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]	>30% of fundamental power >1 W
Continuous Scan Range	>40 GHz
Amplitude Noise	<0.15%[4]
Beam Quality	TEM_{00} M^2 <1.2

TUNING RANGE

Optics[5]	350 - 525 nm[6]			
Crystals[7]				
Example Wavelengths [nm]	350	400	450	500
Typical Tuning Range [nm][8]	+/- 7	+/- 13	+/- 15	+/- 17

ENVIRONMENTAL REQUIREMENTS

Laser Head Dimensions:	305 x 170 x 86mm (9.6 x 6.7 x 3.4") L x W x H
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 5 W. 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. Inclusive of fundamental SolsTiS noise
5. Single optics set, no exchange of mirror set required (350-525 nm)
6. Please enquire for other wavelengths
7. Examples only, crystals are cut for customer specified wavelength
8. Typical tuning range corresponds to 50% efficiency compared to peak

SOLSTIS EXTENSIONS

A range of extensions are available to enhance the wavelength coverage of the system, helping you to explore new regions.

CW Tunable NIR

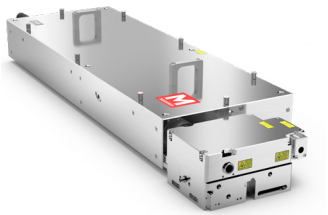
SOLSTIS

A step-change in continuous-wave Ti:Sapphire laser technology - compact, ultra-narrow linewidth, fully automated and widely tunable.

CW Tunable UV

SOLSTIS ECD-X-Q

A frequency quadrupling module that extends the range of SolsTiS output wavelengths to produce narrow linewidth, tunable output in the ultraviolet.



CW Tunable UV Visible IR

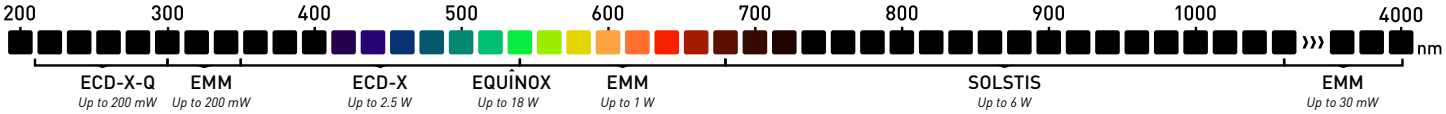
SOLSTIS EMM

An external mixing module that offers fully automated tuning in the visible and IR with further extension options into the UV.

CW

EQUINOX

A single frequency CW 532 nm laser up to 18W. It's inherently stable, reliable, low noise and narrow linewidth.



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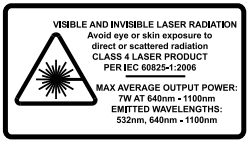
A complete list of our global locations is available on our website.



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