Femtosecond Solid-State Lasers

TeMa Yb Femtosecond Laser

- Output power >3.5 W
- Short pulse duration <100 fs
- Small footprint
- Integrated pump source
- Highly stable
- Self-starting of femtosecond regime

TeMa femtosecond laser with its control unit

Product overview

The Yb-doped TeMa laser radiates at around 1-um wavelength with high average power, enabling the user to enjoy Ti:S-like power ratings at over-micron wavelengths. This design features integrated pump diode module for greater system stability and turn-key operation. The solid-bulk body of the laser ensures maximum rigidity, while self-starting design provides for easy "plug-and-play" operation.

Possible application of the TeMa laser:

- Seed oscillator for amplifiers
- Multi-photon excitation microscopy
- Pump-probe spectroscopy
- Supercontinuum generation
- Generation of terahertz radiation
- Time-resolved spectroscopy
- Optical coherent tomography

TeMa technical specifications

	TeMa
Pulse duration (FWHM), fs	<100
Wavelength (fixed), nm	1050±5
Output power, W*	>3.5
Output power, W** @525±2 nm	>1.7
Repetition rate, MHz*	70
Pulse energy, nJ*	>50
Output power stability***	± 1% rms
Spatial mode	TEMoo
Polarization, linear	>100:1 (horizontal)
Laser head dimensions, mm	410x200x128
Power supply dimensions, mm	290x200x80

** - custom values available upon request*
*** - with optional SHG extension*
**** - at equal room conditions over 12 hours after 30 minutes of warm-up*

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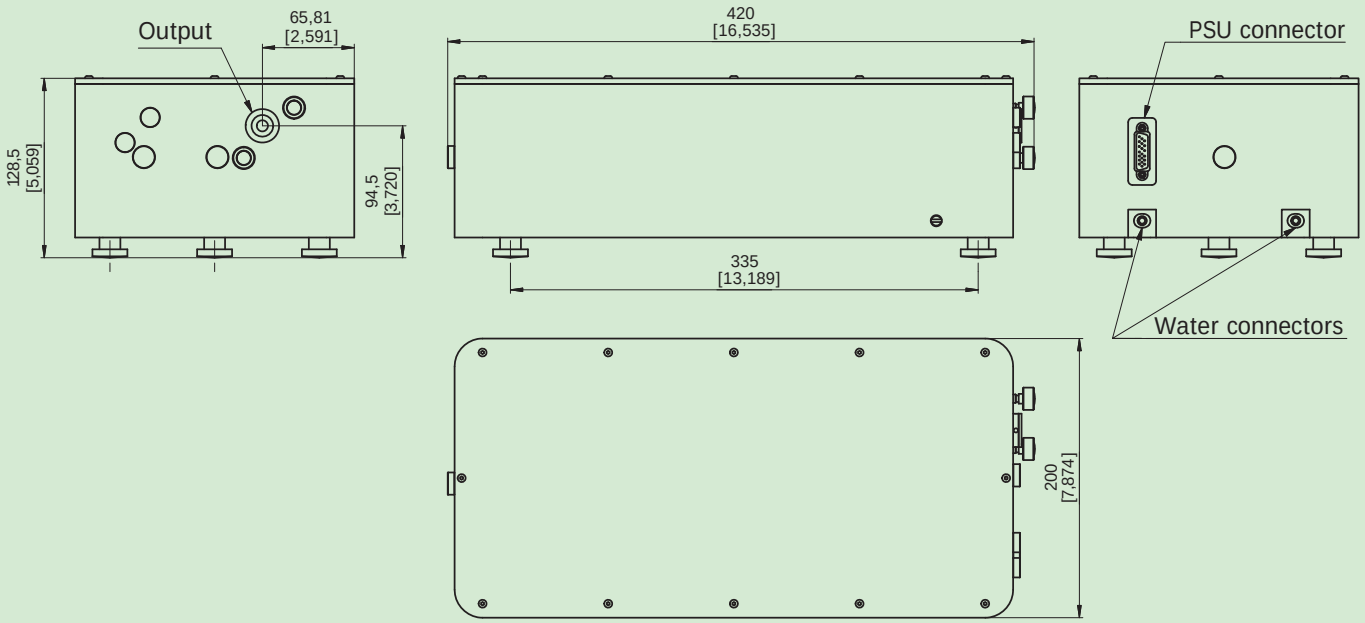
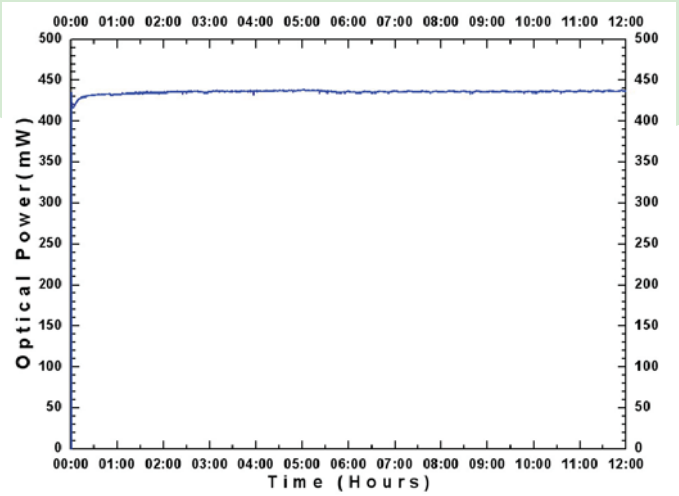
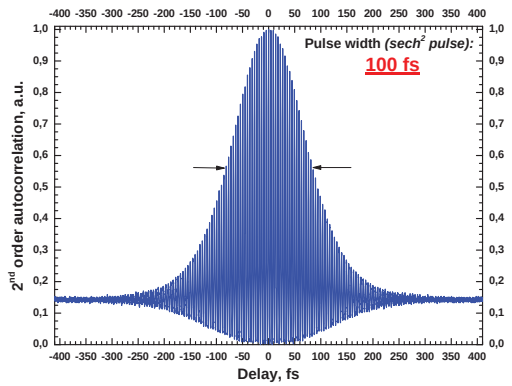


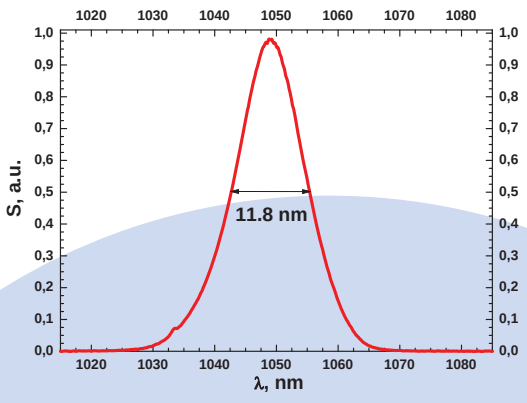
TeMa - mm [inches]



TeMa stability graph



TeMa autocorrelation trace



TeMa typical generation spectrum

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