

Luna-1050

Diode-pumped solid-state femtosecond laser

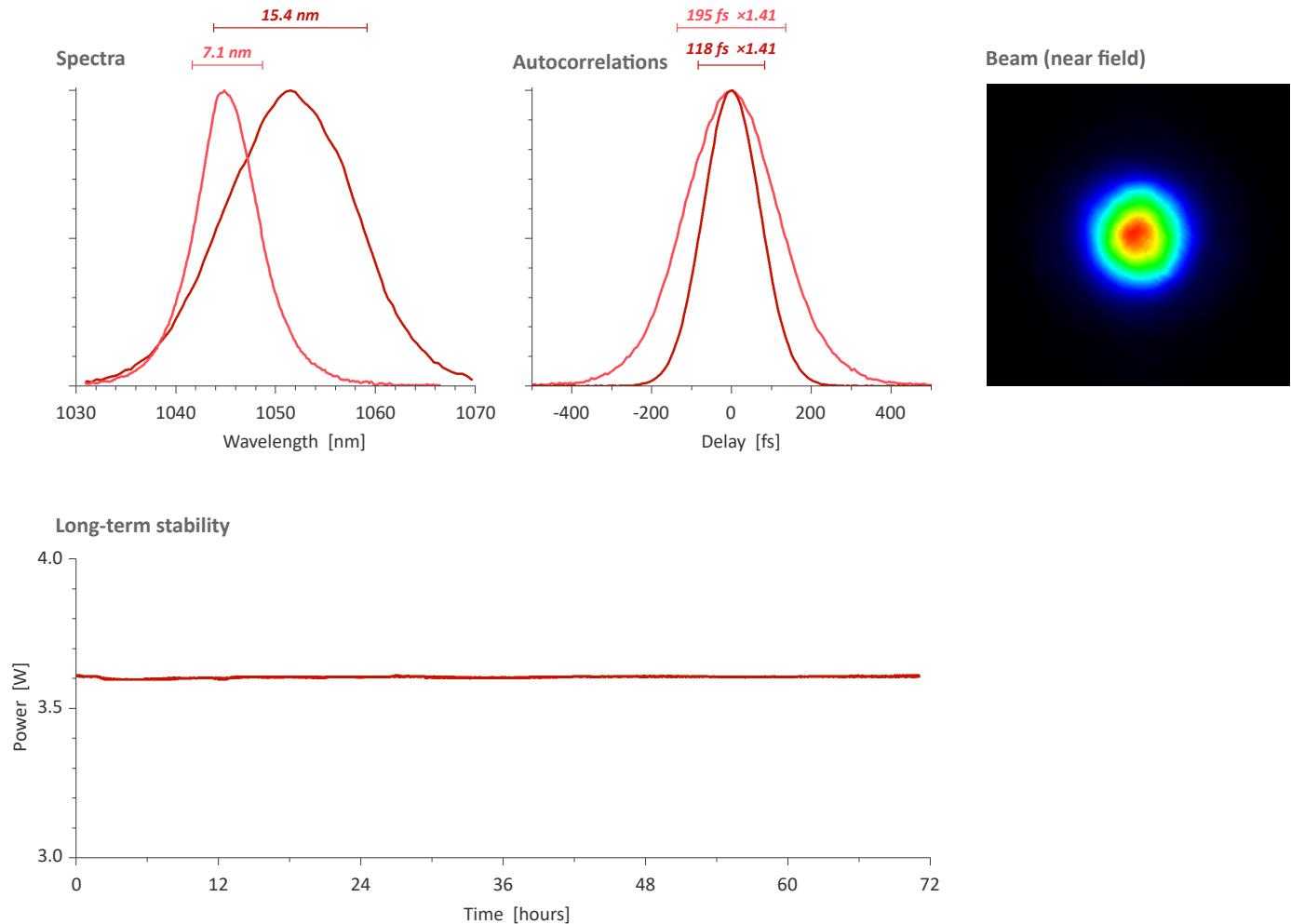
Luna-1050 is an ytterbium diode-pumped solid-state femtosecond laser. The Luna-1050 series includes three models configured to optimize the trade-off between average power and pulse duration. Robust DPSS technology, single-box water-stabilized optical head, and reliable self-starting mode locking ensure consistent long-term performance. Optional kinematic-coupling mounting system can be implemented to thermally isolate the laser head from the optical table. Short-pulse models with up to 16 nm FWHM bandwidth are available upon request.

Specifications

	Luna-1050-3W	Luna-1050-5W	Luna-1050-7W
Average power	3 W	5 W	7 W
Spectral bandwidth (FWHM)	>10 nm	>8 nm	>7 nm
Pulse duration	<150 fs	<200 fs	<250 fs
Central wavelength	1050 ± 5 nm		
Pulse repetition rate	64 ± 5 MHz		
Long-term power stability	<0.5% (STD)		
Polarization	Linear, horizontal		
Beam diameter	1.1 ± 0.2 mm		
Beam quality	$M^2 < 1.2$		
Cooling	Closed-loop chiller		
Dimensions	Optical head, L×W×H: 530×185×120 mm; 15 kg		

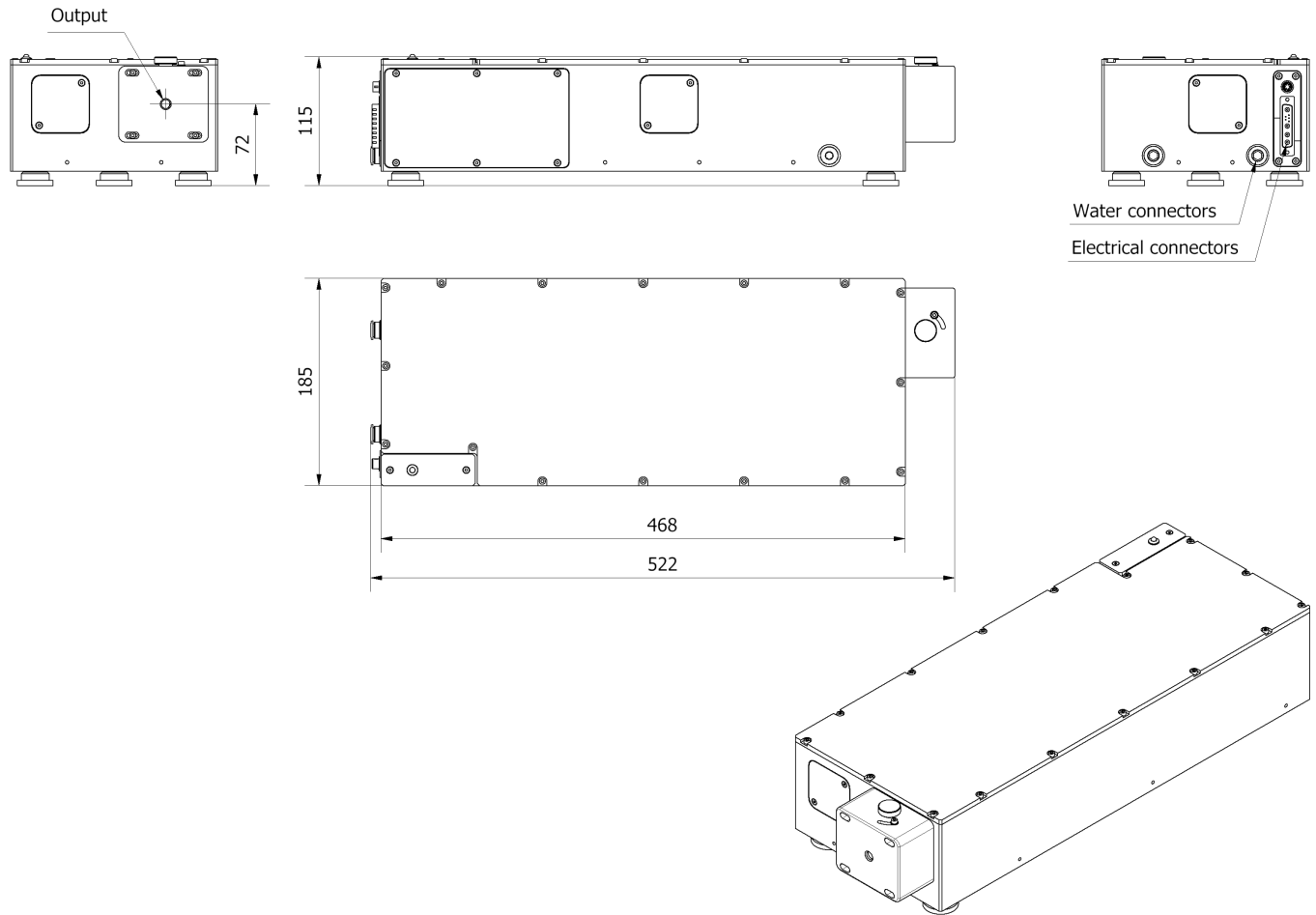
Applications

- Optogenetics and biophotonics
- Ultrafast imaging
- Multiphoton microscopy
- Two-photon polymerization
- Material processing
- Time-resolved spectroscopy
- THz and nonlinear optics
- Seed oscillator for amplifiers



Dimensional drawing

Dimensions are in mm



1000 consecutive self-starts of mode locking

