

Excistar

Compact, High Repetition Rate Excimer Laser

Excistar excimer lasers are table top-size lasers designed for easy system integration. The proven ALMETA tube design ensures industrial-grade performance and endurance. Thousands of Excistar lasers serve a broad range of delicate tasks including cornea ablation, prescription lens marking, and optical sensor manufacturing.



FEATURES

- Ultrashort 193 nm and 248 nm wavelengths for superior ablation and marking
- High repetition rate to enable fast and flexible processing
- Ultimate pulse control to ensure effective use of photons
- ALMETA tube with integrated heating device to ensure reproducible results
- Air-cooled, single-phase design, premix gas supply and CE-declaration compliance for easy integration

APPLICATIONS

- LASIK Vision Correction
- UV Precision Marking
- LA-ICP-MS Analysis
- FBG Writing

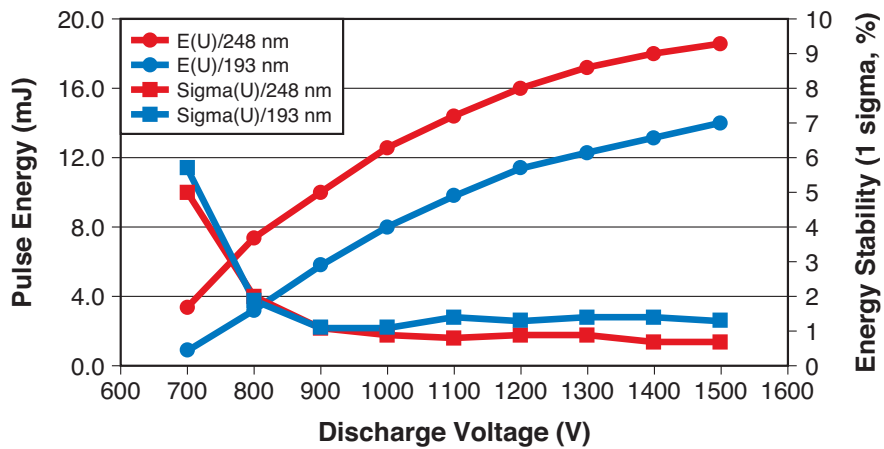
Specifications	200		500		1000	
Maximum Repetition Rate (Hz)	200		500		1000	
Wavelength (nm)	193	248	193	248	193	248
Nominal Pulse Energy (mJ)	5	10	5	10	5	10
Maximum Pulse Energy (mJ)	12	16	12	16	12	16
Nominal Power ¹ (W)	1	2	2.5	5	5	10
Beam Dimension ¹ (FWHM, mm, V x H)	(5.8 ±0.5) x (2.6 ±0.5)	(5.6 ±0.5) x (2.6 ±0.5)	(5.8 ±0.5) x (2.6 ±0.5)	(5.6 ±0.5) x (2.6 ±0.5)	(5.8 ±0.5) x (2.6 ±0.5)	(5.6 ±0.5) x (2.6 ±0.5)
Beam Divergence ¹ (FWHM, mrad, V x H)	<3.0 x 1.5					
Energy Stability (sigma, %)	<2 (valid for ≥ nominal pulse energy at different wavelengths)					
Duty Cycle ¹ (steady operation)	unlimited		limited (up to 25 minutes)		limited (up to 10 minutes)	
Pulse Duration (FWHM, ns)	7 ±2	10 ±3	7 ±2	10 ±3	7 ±2	10 ±3
Cooling	Air					
Weight	66 kg (145.5 lbs.)					
Laser Dimensions	649 x 299 x 401.5 mm (25.6 x 11.8 x 15.8 in)					
Electrical	230 V, 50/60 Hz, single phase					

Notes:

1. Valid for nominal pulse energy and, maximum repetition rate.

Typical Performance Data

ExciStar Performance at 193 nm and 248 nm/500 Hz



Mechanical Specifications

ExciStar

