

# 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 & BENEFITS

- 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

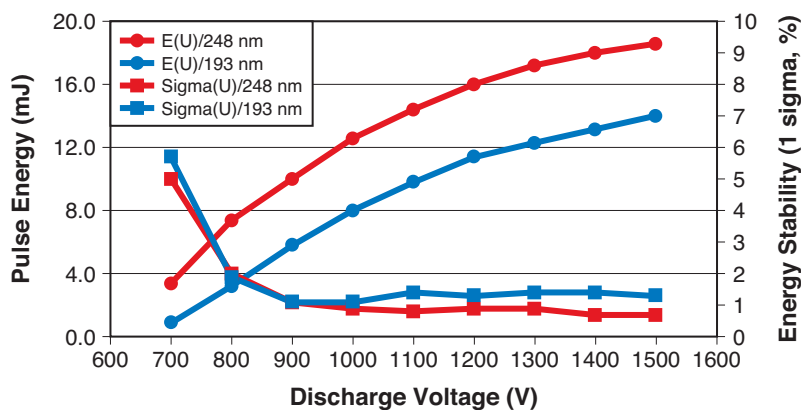
### APPLICATIONS

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

SPECIFICATIONS	Excistar 200		Excistar 500		Excistar 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 <sup>1</sup> (W)	1	2	2.5	5	5	10
Beam Dimension <sup>1</sup> (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 <sup>1</sup> (FWHM, mrad, V x H)	<3.0 x 1.5					
Energy Stability (sigma, %)	<2 (valid for ≥ nominal pulse energy at different wavelengths)					
Duty Cycle <sup>1</sup> (steady operation)	unlimited		limited (up 25 minutes)		limited (up to 10 minutes)	
Pulse Duration (FWHM, ns)	7 ±2					
Cooling	Air					
Weight	66 kg (145.5 lbs.)					
Laser Dimensions (L x W x H)	650 x 300 x 400 mm (25.6 x 11.8 x 15.75 in.)					
Electrical	230 V, 50/60 Hz, single phase					

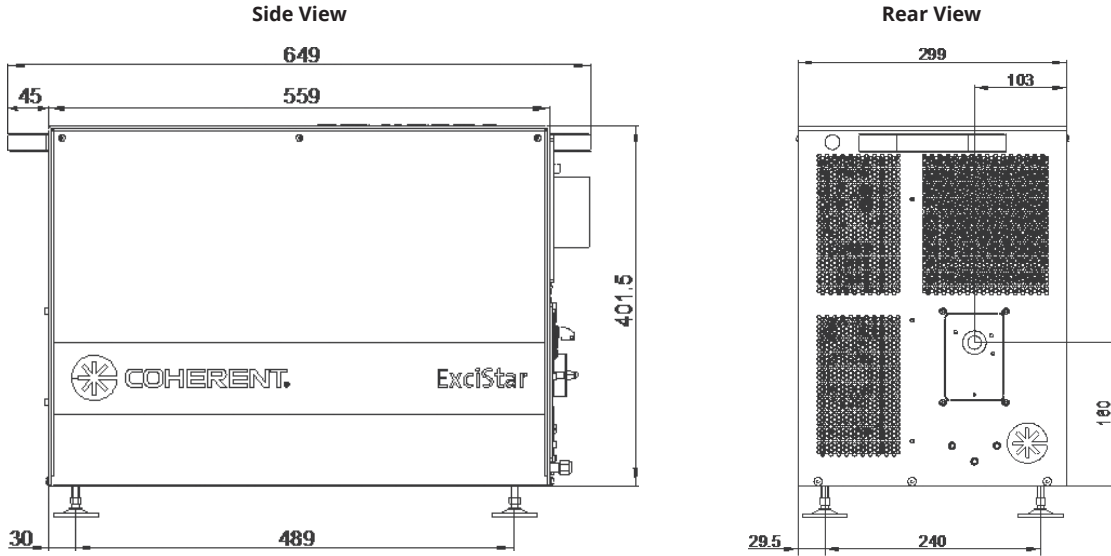
<sup>1</sup> Valid for nominal pulse energy and, maximum repetition rate.

### Excistar Performance at 193 nm and 248 nm/500 Hz



## MECHANICAL SPECIFICATIONS

### Excistar




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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice. Coherent's scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all Excistar Lasers. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative. MC-013-07-0M0121Rev.D Copyright ©2021 Coherent, Inc.





VISIBLE AND INVISIBLE LASER RADIATION.  
AVOID EYE OR SKIN EXPOSURE TO  
DIRECT OR SCATTERED RADIATION.  
CLASS IV LASER RADIATION PRODUCT  
PER EN/IEC 60825-1 (2014)

MAX. AVERAGE POWER: 18 W  
MAX. OUTPUT ENERGY: 25 mJ/pulse  
PULSE DURATION: 3 to 15 ns  
WAVELENGTH: 157 to 351 nm, 620 to 800 nm