



# ATL Lasertechnik

## Advanced Technology Lasers



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### ATLEX 500 FBG

Ultra-compact, high efficient excimer laser for Fiber Bragg Grating (FBG) writing



#### ATLEX-500-FBG main features:

- Soft corona preionization
- HV-solid state pulser
- Laser head volume < 3l
- TMC (Total-Metal-Ceramic) Vessel
- Integrated vacuum pump & halogen filter
- Air Cooled / Optional Liquid Cooled, active thermal management
- RS-485, RS232, USB and fiber optic Interface for system integration
- Flushable optics holder
- Energy stabilization mode
- Dynamic fan speed controls
- Meets European CE-standard
- RoHS compliance

#### Details

#### Applications

- Fibre Bragg grating writing

#### Date

- 30th April 2015

| ATLEX-500-FBG Specifications                              |                                      |      |       |
|---|--------------------------------------|------|-------|
| Gas Medium  | ArF                                  | KrF  | Units |
| Wavelength  | 193                                  | 248  | nm    |
| High Voltage Switching Technique                          | Solid State Switch                   |      |       |
| Max. Pulse Energy <sup>1</sup>                            | 10                                   | 15   | mJ    |
| Max. Average Power  | 4.0                                  | 6.5  | W     |
| Spatial Coherence (Vertical Beam Direction)               | >300                                 | >300 | µm    |
| Max. Rep Rate   | 500                                  |      | Hz    |
| Pulse Duration <sup>2</sup>                               | 5 – 8                                |      | ns    |
| Beam Dimensions <sup>2</sup> (V x H)                      | 4 x 6                                |      | mm    |
| Beam Divergence <sup>2</sup> (V x H)                      | 1 x 2                                |      | mrad  |
| Energy Stability (standard deviation)                     | < 3                                  |      | %     |
| Dimensions (LxWxH) click <a href="#">here</a> for details | 540 x 470 x 370                      |      | mm    |
| Weight  | 60                                   |      | kg    |
| Cooling   | Cooling Air / Optional Liquid        |      |       |
| Power requirement   | 230 VAC / 6,3 A / 1 phase / 50-60 Hz |      |       |

All specifications are typical data and subject to change without notice due to product improvements.

<sup>1</sup> Measured at low rep.rates; allow 10% reduction of output energy and power for laser equipped with stabilization mode.

<sup>2</sup> Typical value, FWHM

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**ATL Lasertechnik GmbH**

Burger Str. 28  
D-42929 Wermelskirchen  
Germany

Tel: +49 2196 88 79 893  
Fax: +49 2196 88 79 895  
Ust. - IdNr: DE 179289235

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