

# ATLEX-FBG Series

Compact, high efficient excimer laser  
for Fiber Bragg Grating (FBG) writing

## Key Features:

- TMC (Total-Metal-Ceramic) Vessel
- Superior Beam Stability for FBG writing applications
- Solid State Switch
- Laser Head Volume < 3 l
- Air-Cooling, optional Liquid Cooling
- Flushable Optics Holder
- Integrated 4-Valve System for Easy Gas Handling
- RS485, RS232, USB and FOC Interface for System Integration
- Energy Stabilization Unit
- Integrated Vacuum Pump & Halogen Filter
- Meets European CE Standard, RoHS Compliant



## Technical Data

Gas Medium	ArF	KrF	Units
Wavelength	193	248	nm
High Voltage Switching Technique	Solid State Switch	Solid State Switch	
Max. Pulse Energy <sup>1)</sup>	10	15	mJ
Max. Average Power			
ATLEX-300-FBG	2.4	4.0	W
ATLEX-500-FBG	4.0	6.5	W
Spatial Coherence <sup>2)</sup> (Vertical Beam Direction)	> 300	> 300	µm
Max. Rep. Rate			
ATLEX-300-FBG	300		Hz
ATLEX-500-FBG	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 (Stand. Dev.)	< 2		%
Dimensions (L x W x H)	540 x 470 x 370		mm
Weight	60		kg
Cooling	Air (Liquid optional)		
Power Requirements	230 VAC / 6,3 A / 50-60 Hz / 1 Phase		

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

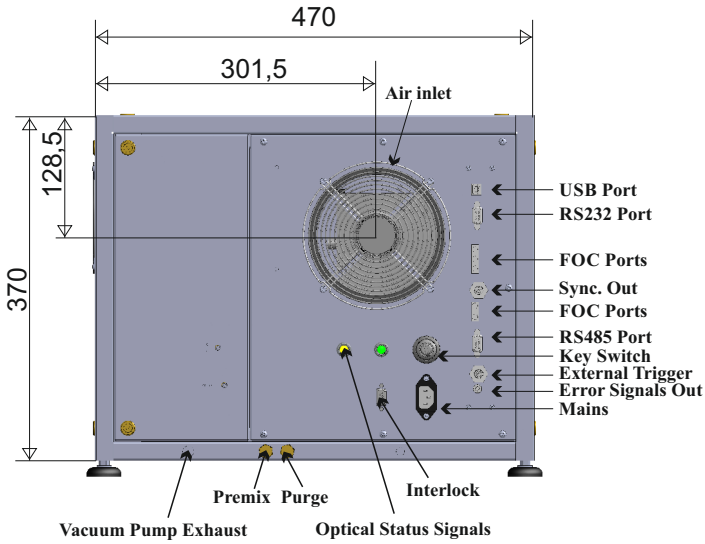
<sup>1)</sup> measured at low rep. rates; allow 10% reduction of output energy and power for laser equipped with stabilization mode

<sup>2)</sup> Typical Value, FWHM

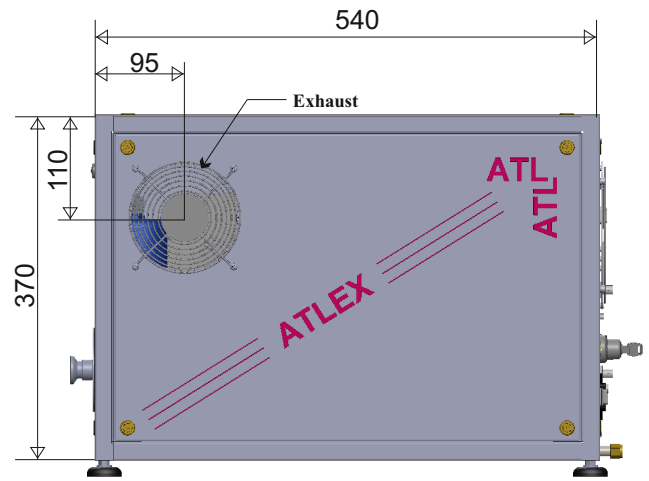
# ATLEX-FBG Series Dimensions



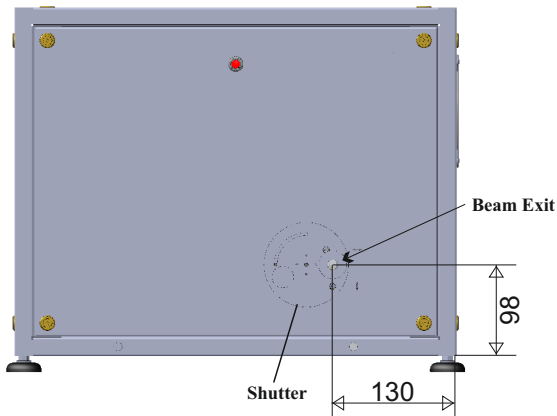
Rear view



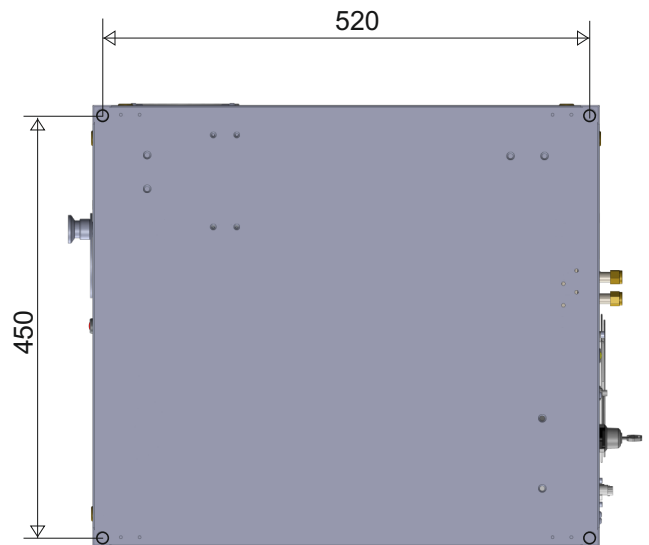
Side view



Front view



Bottom view



All dimensions in mm

ATLEX-FBG complies with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health.

**ATL Lasertechnik GmbH**  
Burger Str. 28  
D-42929 Wermelskirchen  
Tel.: +49 (2196) 88 79 893  
Fax: +49 (2196) 88 79 895  
Internet: [www.atl-laser.de](http://www.atl-laser.de)



Visible and invisible Laser Radiation. Avoid eye or skin exposure to direct or scattered Radiation. CLASS IV Laser radiation product per EN60825-1 (1994).