

# eMOPA 355-100

Diode pumped passively Q-switched solid state laser

- 355 nm
- Single Pulse
- 0.9 - 1.3 ns
- single shot (pulse on demand) – 1 kHz
- > 100 µJ
- External Trigger Mode



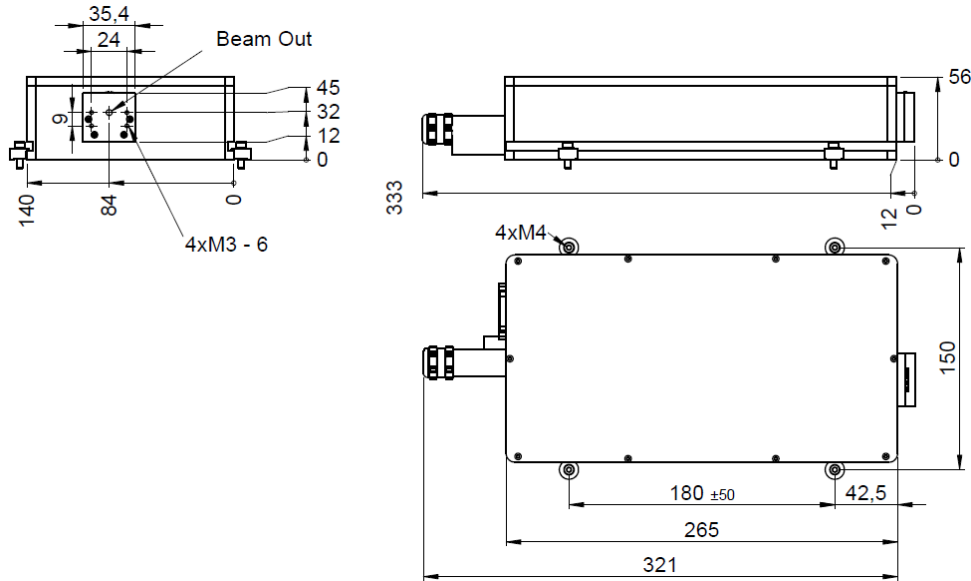
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<b>Optical Data</b>	Wavelength	355 nm
	Peak Power	> 80 kW @ 1000 Hz
	Pulse Energy	> 100 µJ @ 1000 Hz
	Beam Divergence (full angle)	< 3.5 mrad
	Beam Ellipticity	< 2:1
	Beam Diameter	450 ± 150 µm (at laser exit)
	Spatial Mode	TEM <sub>00</sub>
	Pulse Repetition Rate (with external trigger)	single shot (pulse on demand) – 1 kHz
	Pulse Width (FWHM)	≤ 0.9 – 1.3 ns
	Polarization Ratio	> 100:1, vertical
	Pulse Energy Drift over 6h <sup>1)</sup>	< ± 3 %
	Pulse-to-Pulse Energy Stability <sup>2)</sup>	< 2%
Laser Classification	3B / III	
<b>Optical Output</b>	Free Beam	
<b>Electrical Data</b>	Electrical Power Consumption	< 100 W
	Line Voltage	90 - 265 V AC (50-60 Hz)
<b>Interface</b>	USB / RS232	
	BNC connector for external triggering (TTL)	
	SMB connector for 24 V DC output	
<b>Miscellaneous</b>	Warm-up Time	< 10 min
	Operating Temperature	22 - 32 °C
	Laser Head Size	56 x 140 x 265 mm (H x W x L)
	Controller (Stand-Alone Unit Size)	129,5 x 177 x 180 mm (H x W x L)
<b>Options</b>	Multimode fiber coupling	
	Synchronization signal output (rise time < 1.5 ns)	
	Electrical or manual wavelength switch (355nm – 532nm) or electrical beam blocker	
	External telescope (beam expander) / Electrical or manual attenuator	
<sup>1)</sup> Averaged over 10s after 10min of continuous operation @ 1kHz activated closed loop control		
<sup>2)</sup> Over 1000 pulses @ 1kHz after 10min of continuous operation		

## Dimensions

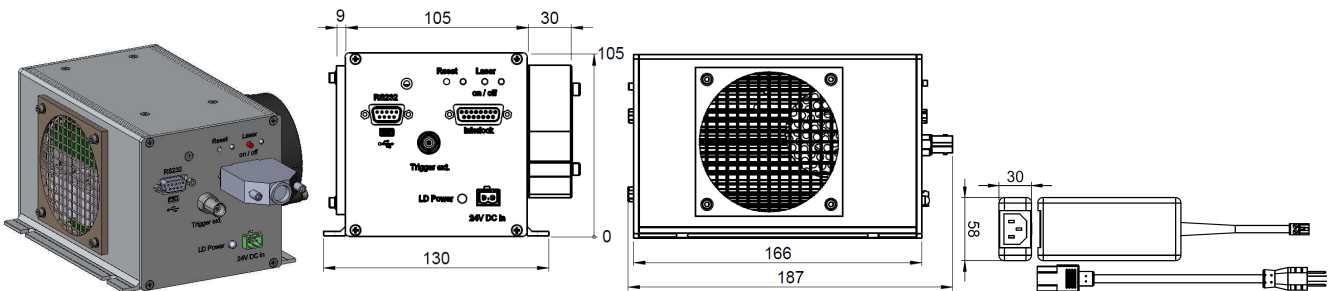
Laser Head:

265 x 140 x 56 mm



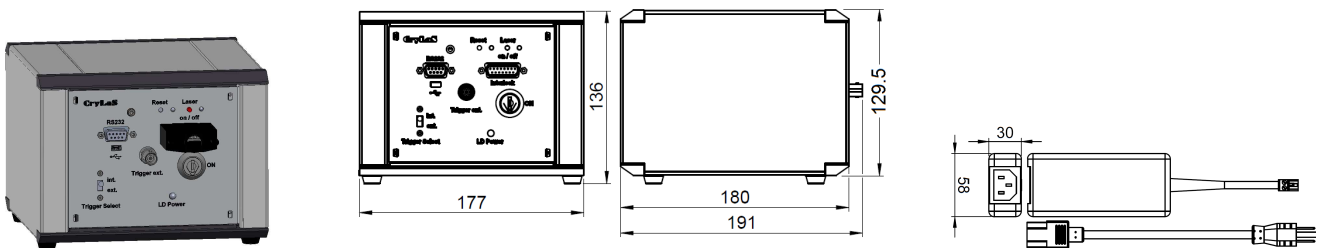
Controller OEM:

166 x 144 x 105 mm



Controller Stand-Alone:

180 x 177 x 129.5 mm



## Laser Safety Labels

The eMOPA 355-100 lasers are class 3B according to IEC 60825-1

wavelength:	355 nm
max. Output:	300 µJ
pulse duration:	1 ns
max. repetition rate	1000 Hz
<small>Complies with IEC 60825-1:2007 Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No.50, dated July 26, 2001</small>	

INVISIBLE  
LASER RADIATION  
AVOID EXPOSURE TO BEAM  
CLASS 3B LASER PRODUCT



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Product specifications are subject to change without notice