

# MOPA 355-500mW

Diode pumped passively Q-switched solid state laser

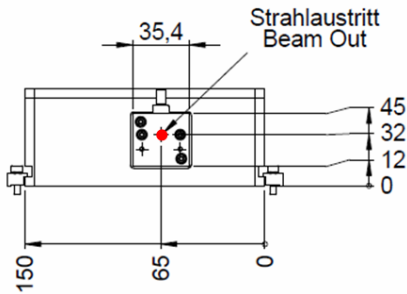
- 355 nm
- Single Pulse
- < 1.2 ns
- 1 – 20 kHz
- > 500 mW
- External / Internal Trigger Mode



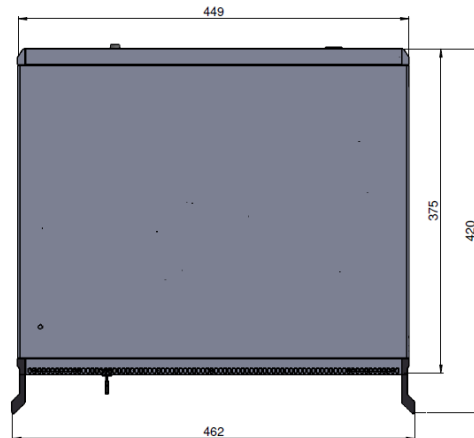
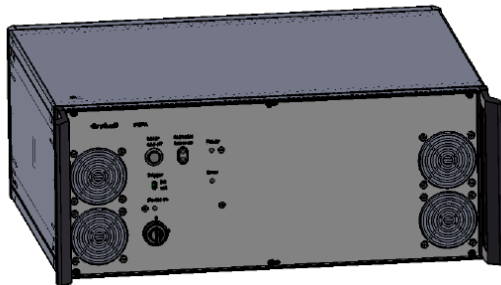
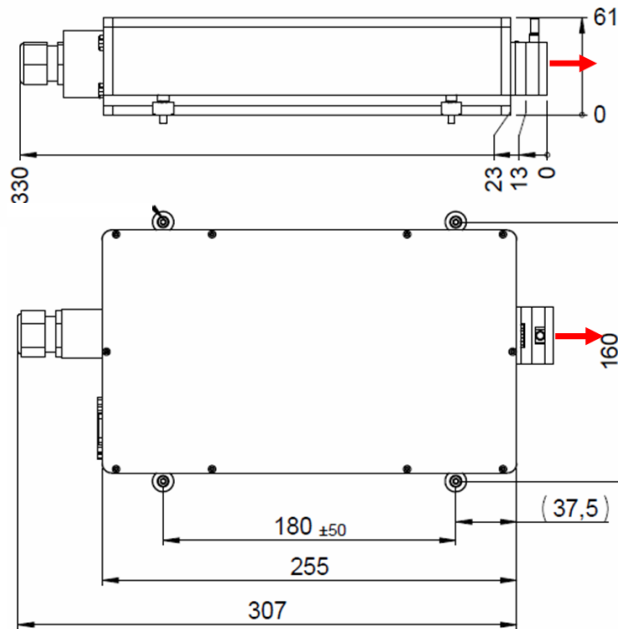
**biology · biomedicine · chemistry · analytics**

<b>Optical Data</b>	Wavelength	355 nm
	Average Power	> 500 mW @ 15 kHz
	Pulse Energy	> 35 µJ @ 15 kHz
	Beam Divergence (full angle)	< 3.0 mrad
	Beam Ellipticity	< 2:1
	Beam Diameter	0.5 ± 0.3 mm (at laser exit)
	Spatial Mode	TEM <sub>00</sub>
	Pulse Repetition Rate (with external trigger)	1 Hz - 20 kHz
	Pulse Width (FWHM)	< 1.2 ns
	Polarization Ratio	> 100:1, vertical
	Pulse Energy Drift <sup>1)</sup>	< ± 3 % @ 15 kHz
	Pulse-to-Pulse Energy Stability <sup>2)</sup>	< 15 % rms @ 15 kHz
Laser Classification	4 / IV	
<b>Optical Output</b>	Free Beam	
<b>Electrical Data</b>	Electrical Power Consumption	< 250 W
	Line Voltage	100 - 250 V AC (50-60 Hz)
<b>Interface</b>	USB	
	BNC connector for external triggering (TTL)	
	SMB connector for 24 V DC output	
<b>Miscellaneous</b>	Warm-up Time	< 10 min
	Operating Temperature	18 - 38 °C
	Laser Head Size	61 x 150 x 330 mm (H x W x L)
	Stand Alone Unit Size (core size)	184 x 449 x 375 mm (H x W x L)
<b>Options</b>	External telescope (beam expander) or multimode fiber coupling	
	Manual or electrical attenuator	
	Synchronization signal output (rise time < 2 ns)	
	Electrical or manual wavelength switch (355nm – 532nm) or electrical beam blocker	
	<sup>1)</sup> Drift over 8 hours, energy averaged over 10 sec after 5 min of continuous operation, temperature variation ± 3 °C and < 3 °C/hour, with activated closed loop control for the pulse energy	
	<sup>2)</sup> RMS over 1000 pulses after 5 min of continuous operation.	

## Laser Head and Controller



Laser Head  
(height = 61; width = 150; length = 255  
core dimensions in mm )



Stand Alone Unit  
(height = 184, width = 449; length = 375  
core dimensions in mm )

## Laser Safety Labels

The MOPA 355-500mW lasers are class 4 / IV according to IEC 60825-1:2014

