

Preliminary

MOPA 355-500mW

Diode pumped passively Q-switched solid state laser

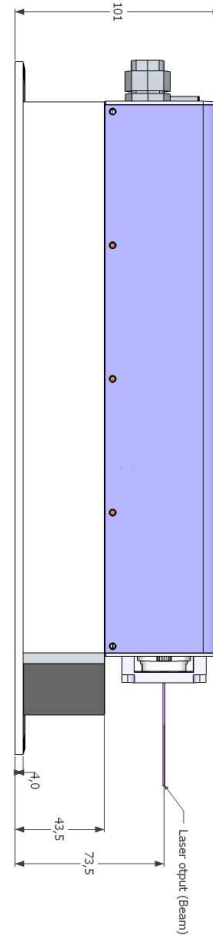
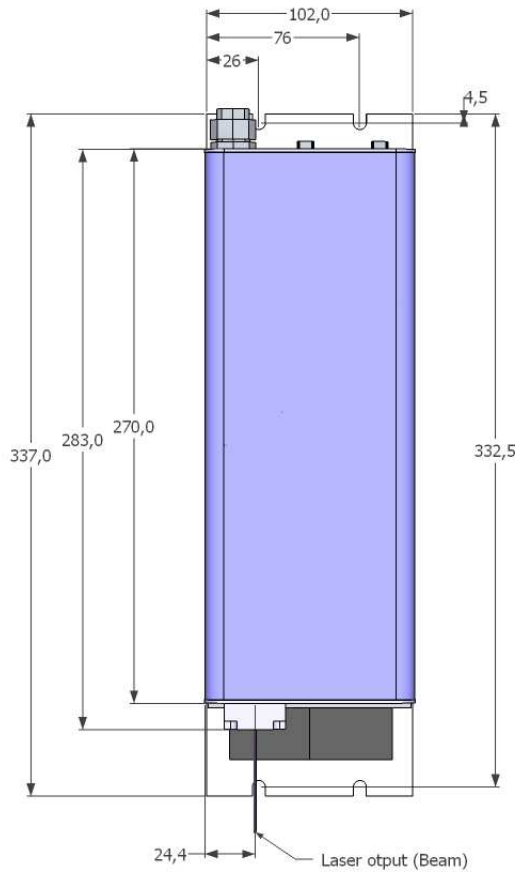
- 355 nm
- Single Pulse
- ≤ 1.1 ns
- 1 – 20 kHz
- > 500 mW
- External / Internal Trigger Mode



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	Wavelength	355 nm
	Average Power	> 500 mW @ 15 kHz
	Pulse Energy	> 35 μ J @ 15 kHz
	Beam Divergence (full angle)	< 3.0 mrad
	Beam Ellipticity	< 2:1
	Beam Diameter	0.7 \pm 0.3 mm (at laser exit)
	Spatial Mode	TEM ₀₀
	Pulse Repetition Rate (with external trigger)	1 Hz - 20 kHz
	Pulse Width (FWHM)	≤ 1.1 ns
	Polarization Ratio	> 100:1, vertical
	Pulse Energy Stability (averaged over 8 hrs)	< ± 3 % @ 15 kHz
	Pulse-to-Pulse Energy Stability (over 60 sec)	< ± 3 % (< 1% rms)
	Laser Classification	4 / IV
Optical Output	Free Beam	
Electrical Data	Electrical Power Consumption	< 250 W
	Line Voltage	90 - 265 V AC (50-60 Hz)
Interface	USB	
	BNC connector for external triggering (TTL)	
	SMB connector for 24 V DC output	
Miscellaneous	Warm-up Time	< 10 min
	Operating Temperature	18 - 38 $^{\circ}$ C
	Laser Head Size	101 x 102 x 283 mm (H x W x L)
	Stand-Alone Unit Size	180 x 236 x 316 mm (H x W x L)
Options	Multimode fiber coupling	
	Synchronization signal output (rise time < 2 ns)	
	Electrical or manual wavelength switch (355nm – 532nm) or electrical beam blocker	
	External telescope (beam expander) / Electrical or manual attenuator	

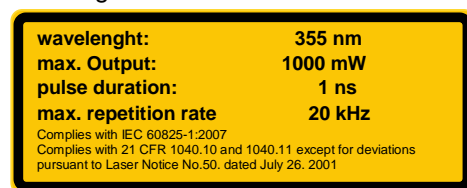
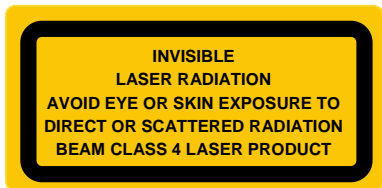
Laser Head and Controller



Front panel of the Stand-Alone unit
(width = 236; height = 180; length = 316;
all dimensions in mm)

Laser Safety Labels

The MOPA 355-500mW lasers are class 4 / IV according to IEC 60825-1:2007



April, 2011