

FDSS 355-300

Diode pumped passively Q-switched solid state laser

- 355 nm
- single pulse
- < 1.5 ns
- 1 – 80 Hz
- > 300 µJ

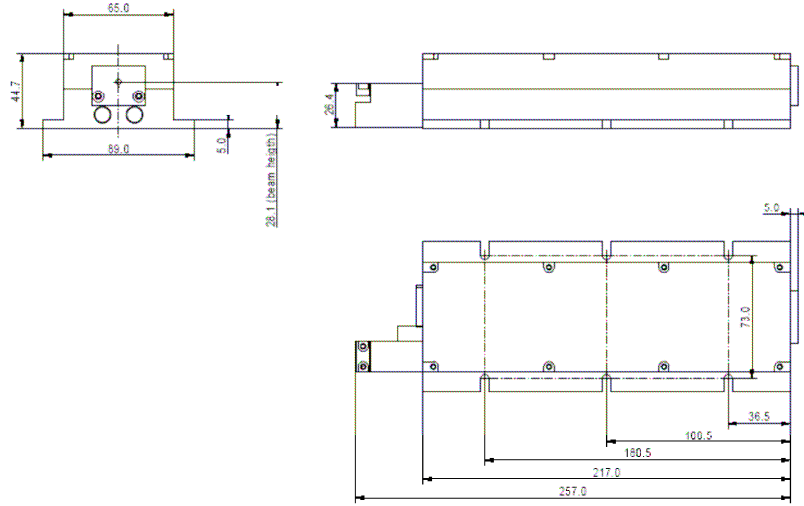


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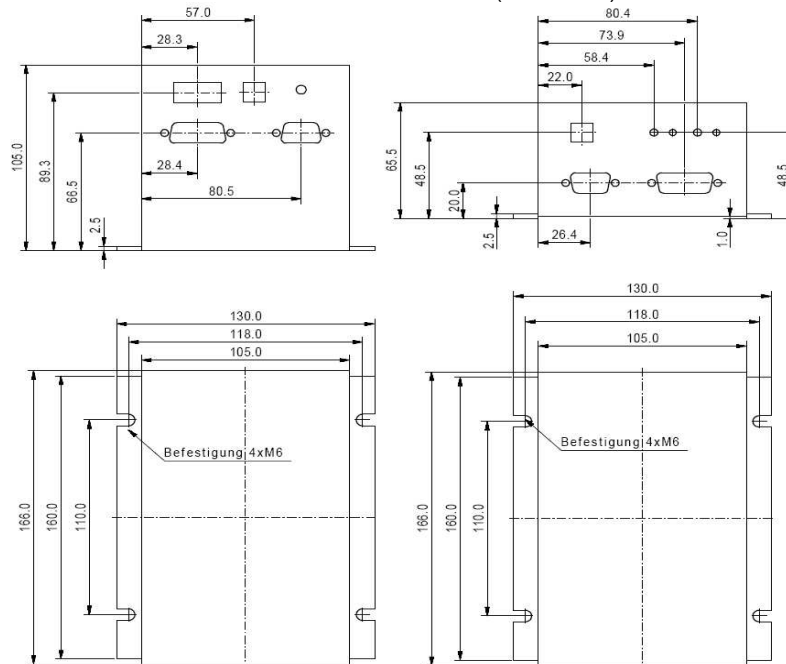
Optical Data	Wavelength	355 nm
	Beam Divergence (full angle)	< 2.5 mrad
	Beam Ellipticity	< 2:1
	Waist Diameter	500 ± 150 µm (located at about 110 mm inside the laser head)
	Beam Diameter	0.8 ± 0.3 mm (at laser exit)
	Peak Power	> 200 kW @ 20 Hz
	Pulse Energy	> 300 µJ @ 20 Hz
	Pulse Repetition Rate (with external trigger)	1 - 80 Hz
	Pulse Width (FWHM)	< 1.5 ns
	Polarization Ratio	> 100:1, vertical
	Long term pulse energy stability (6 hrs)	< ± 8 %
	Laser Classification	3B / IIIb
Optical Output	Free Beam	
Electrical Data	Electrical Power Consumption	< 150 W
	Line Voltage	90 - 265 V AC (50-60 Hz) or 24 V DC
Interface	RS 232 (USB on request)	
Miscellaneous	Warm-up Time	< 10 min
	Operating Temperature	18 - 38 °C
	Laser Head Size	217 x 65 x 45 mm ³ (core dimensions)
Options	SMA-connector for fiber with core diameter ≥ 400 µm	
	Synchronization signal output (rise time < 2 ns)	
	Electrical driven shutter	
	Heat sink with fan (recommended for repetition rates > 50 Hz)	

Laser Head and Controller

Laser head (schematic)

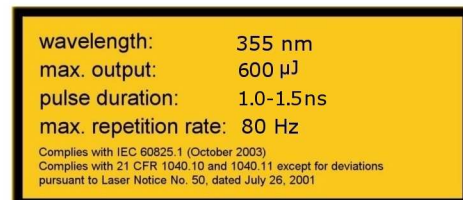


Laser booster and controller (schematic)



Laser Safety Labels

The FTSS355-300 lasers are class 3B according to IEC 60825-1.



May, 2008