

FTSS 355-50

Diode pumped passively Q-switched solid state laser

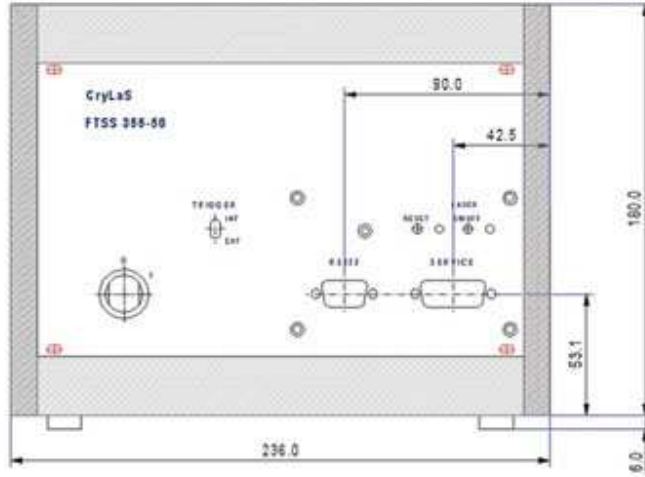
- 355 nm
- single pulse
- < 1 ns
- 1 – 200 Hz (1 kHz optional)
- > 70 µJ



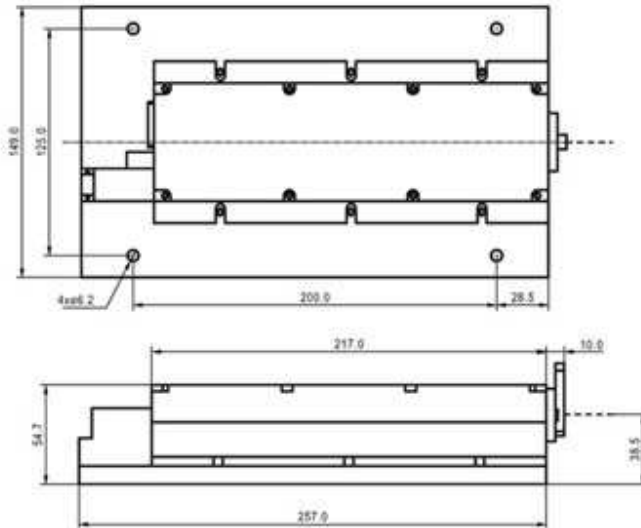
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Optical Data	Wavelength	355 nm
	Spatial Mode	TEM ₀₀
	M ²	< 1.5
	Beam Divergence (full angle)	< 2.6 mrad (horizontal) < 3.5 mrad (vertical)
	Beam Ellipticity	< 2:1
	Waist Diameter	280 ± 80 µm (horizontal) 200 ± 60 µm (vertical) (located at about 110mm inside the laser head)
	Beam Diameter	450 ± 150 µm (at laser exit)
	Peak Power	> 70 kW / > 45 kW @ 1-200 Hz
	Pulse Energy	> 70 µJ @ 1-200 Hz
	Pulse Repetition Rate (with external trigger)	1 - 200 Hz
	Pulse Width (FWHM)	≤ 1.0 ns / ≤ 1.5 ns
	Polarization Ratio	> 100:1, vertical
	Long term pulse energy stability (6 hrs)	< ± 3 %
	Laser Classification	3B / IIIb
Residual 532 nm Emission:	< 0.05%	
Optical Output	Free Beam	
Electrical Data	Electrical Power Consumption	< 70 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	20 - 40 °C
	Laser Head Size	217 x 65 x 45 mm (core dimensions)
Options	SMA-connector for fiber with core diameter ≥ 70 µm	
	Manual switch from 355 nm to 532 nm	
	Synchronization signal output (rise time < 2 ns)	
	Electrical driven shutter or wavelength switch	
	upgrade 1 kHz repetition rate (Parameters on request)	

Laser Head and Controller (stand alone version)



Front side of the Laser Controller
(outer dimensions: w = 236mm, h = 180mm, l = 255mm)



Top and side view of the Laser Head
with shutter and heat sink (10mm thickness)

Laser Safety Labels

