

# FTSS 355-50

Diode pumped passively Q-switched solid state laser

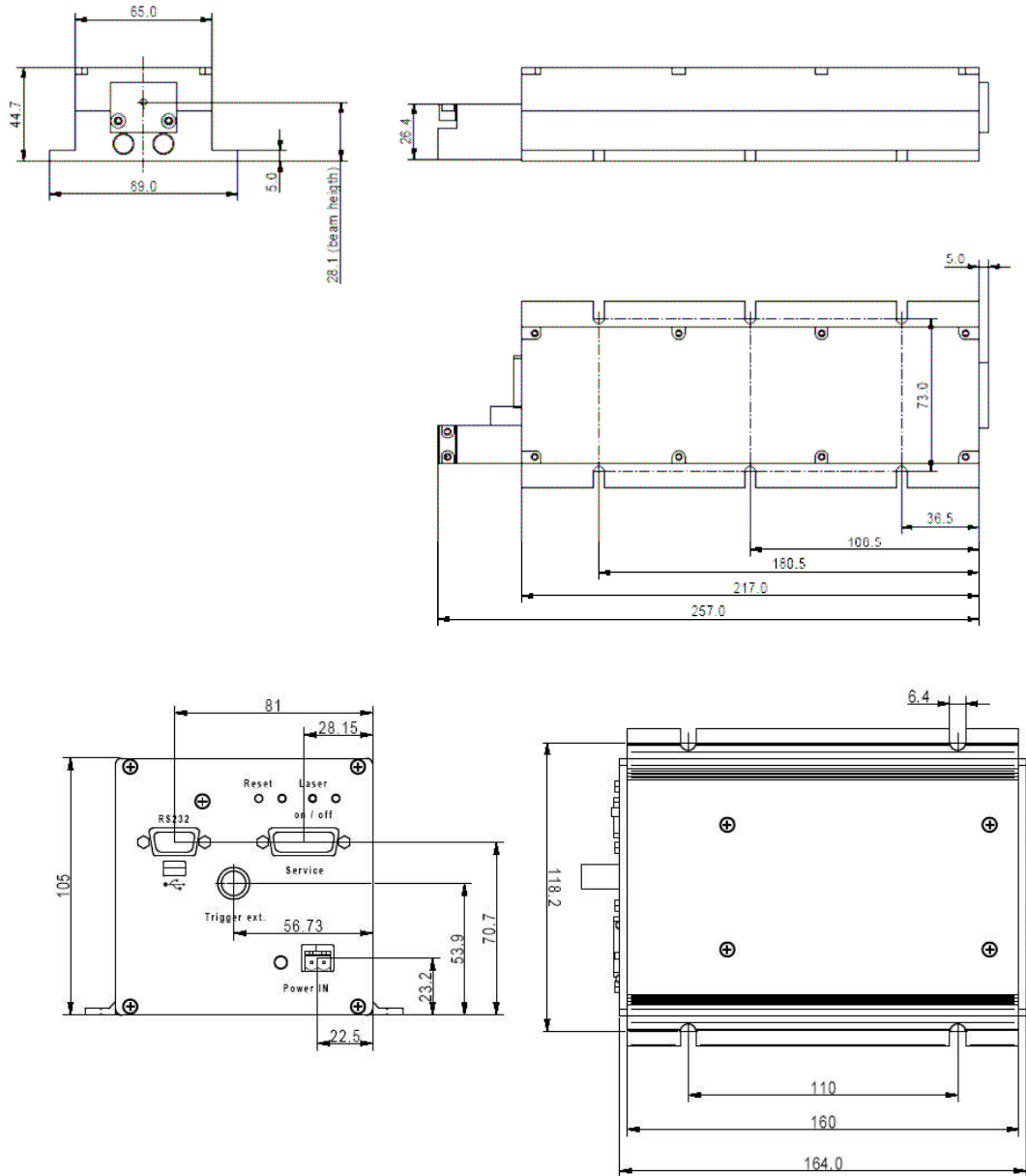
- 355 nm
- single pulse
- < 1 ns
- 1 – 100 Hz (up to 1 kHz optional)
- > 70 μJ



## biology · biomedicine · chemistry · analytics

<b>Optical Data</b>	Wavelength	355 nm
	Spatial Mode	TEM <sub>00</sub>
	M <sup>2</sup>	< 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 110 mm inside the laser head)
	Beam Diameter	450 ± 150 μm (at laser exit)
	Peak Power	> 70 kW @ 1 - 100 Hz
	Pulse Energy	> 70 μJ @ 1 - 100 Hz
	Pulse Repetition Rate (with external trigger)	1 - 100 Hz
	Pulse Width (FWHM)	≤ 1.0 ns
	Polarization Ratio	> 100:1, vertical
	Long term pulse energy stability (6 hrs)	< ± 3 %
	Laser Classification	3B / IIIb
Residual 532 nm Emission	< 0.05 %	
<b>Optical Output</b>	Free Beam	
<b>Electrical Data</b>	Electrical Power Consumption	< 70 W
	Line Voltage	90 - 265 V AC (50-60 Hz) or 24 V DC
<b>Interface</b>	RS 232, USB	
<b>Miscellaneous</b>	Warm-up Time	< 10 min
	Operating Temperature	18 - 38 °C
	Laser Head Size	217 x 65 x 45 mm <sup>3</sup> (core dimensions)
<b>Options</b>	Fiber coupling for fiber with core diameter ≥ 100 μm	
	Manual switch from 355 nm to 532 nm	
	Synchronization signal output (rise time < 2 ns)	
	Electrical driven shutter or wavelength switch	
Upgrade up to 1 kHz repetition rate (Parameters on request)		

## Laser Head and Controller



Front and top view of OEM-laser controller

### Laser Safety Labels

The FTSS355-50 lasers are class 3B according to IEC 60825-1.

