

FDSS 532-150

Diode pumped passively Q-switched solid state laser

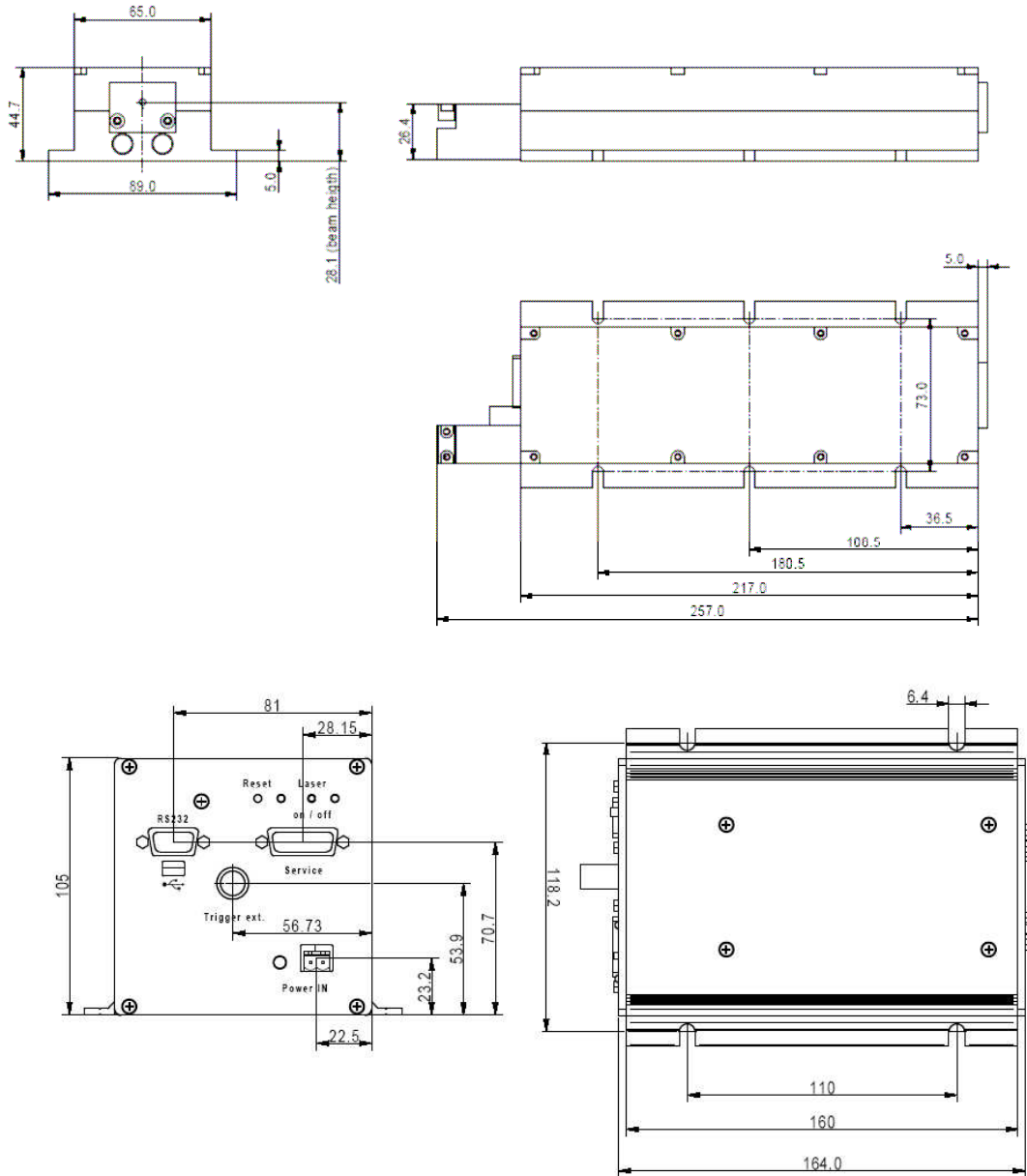
- 532 nm
- single pulse
- < 1.2 ns
- 1 – 100 Hz (up to 1 kHz optional)
- > 150 µJ



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Optical Data	Wavelength	532 nm
	Spatial Mode	TEM ₀₀
	M ²	< 1.5
	Beam Divergence (full angle)	< 4.5 mrad (horizontal) < 5.5 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	500 ± 150 µm (at laser exit)
	Peak Power	> 120 kW @ 1 - 100 Hz
	Pulse Energy	> 150 µJ @ 1 - 100 Hz
	Pulse Repetition Rate (with external trigger)	1 - 100 Hz
	Pulse Width (FWHM)	< 1.2 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	< 70 W
	Line Voltage	90 - 265 V AC (50-60 Hz) or 24 V DC
Interface	RS 232, USB	
Miscellaneous	Warm-up Time	< 10 min
	Operating Temperature	18 - 38 °C
	Laser Head Size	217 x 65 x 45 mm ³ (core dimensions)
Options	Fiber coupling for fiber with core diameter ≥ 100 µm	
	Manual switch from 532 nm to 1064 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 FDSS532-150 lasers are class 3B according to IEC 60825-1.

