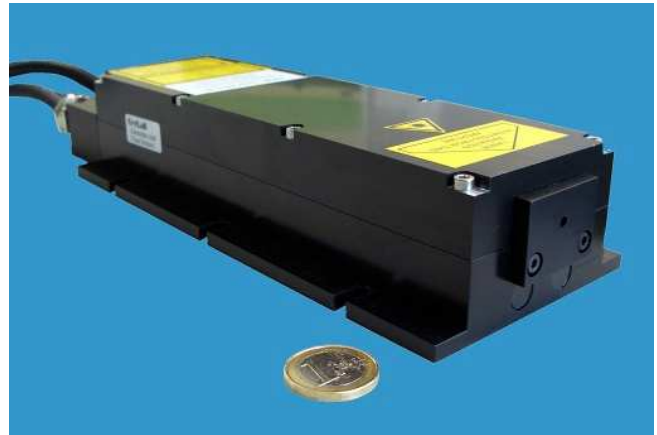


# FDSS 532-150

Diode pumped passively Q-switched solid state laser

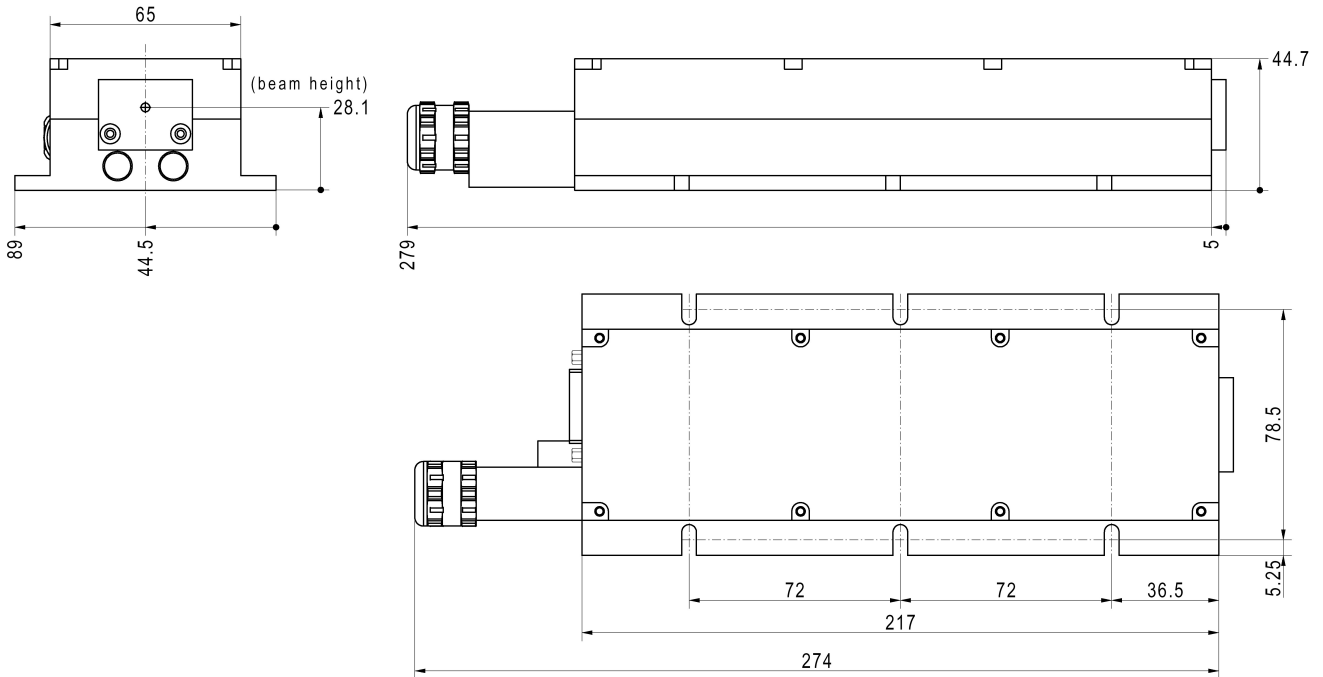
- 532 nm
- single pulse
- 1.1 - 1.5 ns
- 1 – 100 Hz (up to 1 kHz optional)
- > 150 µJ



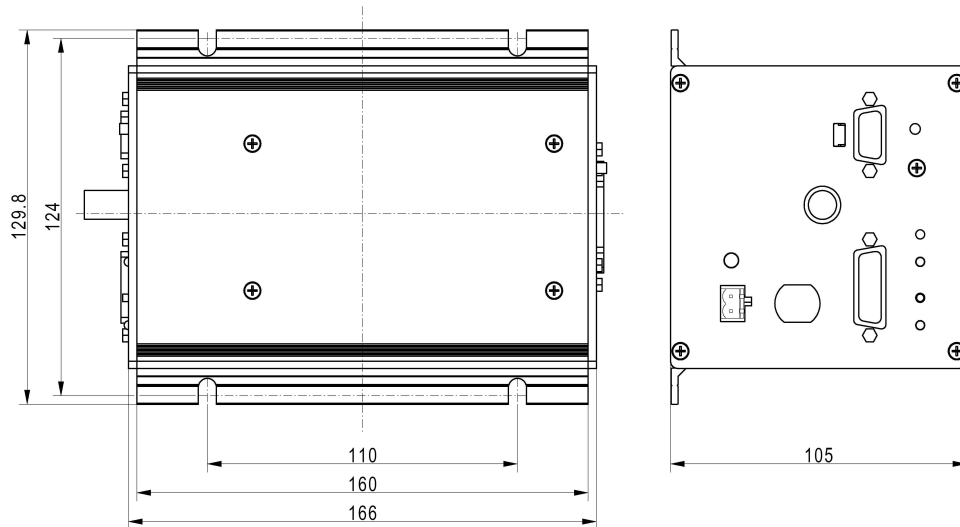
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<b>Optical Data</b>	Wavelength	532 nm
	Spatial Mode	TEM <sub>00</sub>
	M <sup>2</sup>	< 1.5
	Beam Divergence (full angle)	< 5.5 mrad
	Beam Ellipticity	< 2:1
	Waist Diameter	280 ± 80 µm (located at about 110mm inside the laser head)
	Beam Diameter	500 ± 150 µm (at laser exit)
	Peak Power	100 kW - 140 kW @ 1 - 100 Hz
	Pulse Energy	> 150 µJ @ 1 - 100 Hz (> 50µJ @ 1kHz option)
	Pulse Repetition Rate (with external trigger)	1 - 100 Hz
	Pulse Width (FWHM)	1.1 - 1.5 ns
	Polarization Ratio	> 100:1, vertical
	Long term pulse energy stability (6 hrs)	< ± 2 %
Pulse-To-Pulse Stability	< 1% rms (of pulse energy)	
Laser Classification	3B / IIIb	
<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 (core dimensions)
<b>Options</b>	Fiber coupling for fibers with core diameter ≥ 100µm	
	Synchronization signal output (rise time < 2 ns)	
	Manual shutter or electrical beam blocker	
	Manual or electrical driven wavelength switch 532 nm / 1064 nm	
	Upgrade to 1 kHz repetition rate (parameters on request)	
	External telescope (e.g. M=5)	
	Manual or electrical attenuator	
	Stand Alone System (incl. key-switch, heat-sink, manual shutter; CDRH compliant)	

## Laser Head and Controller



OEM-Controller



## Laser Safety Labels

The FDSS532-150 lasers are class 3B according to IEC 60825-1:2007

