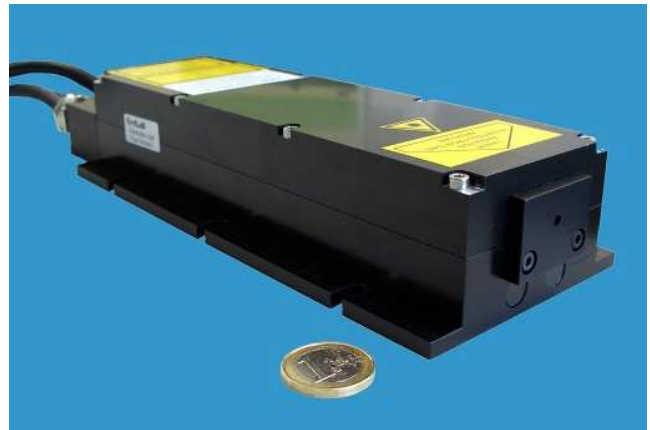


# DSS 1064-450

Diode pumped passively Q-switched solid state laser

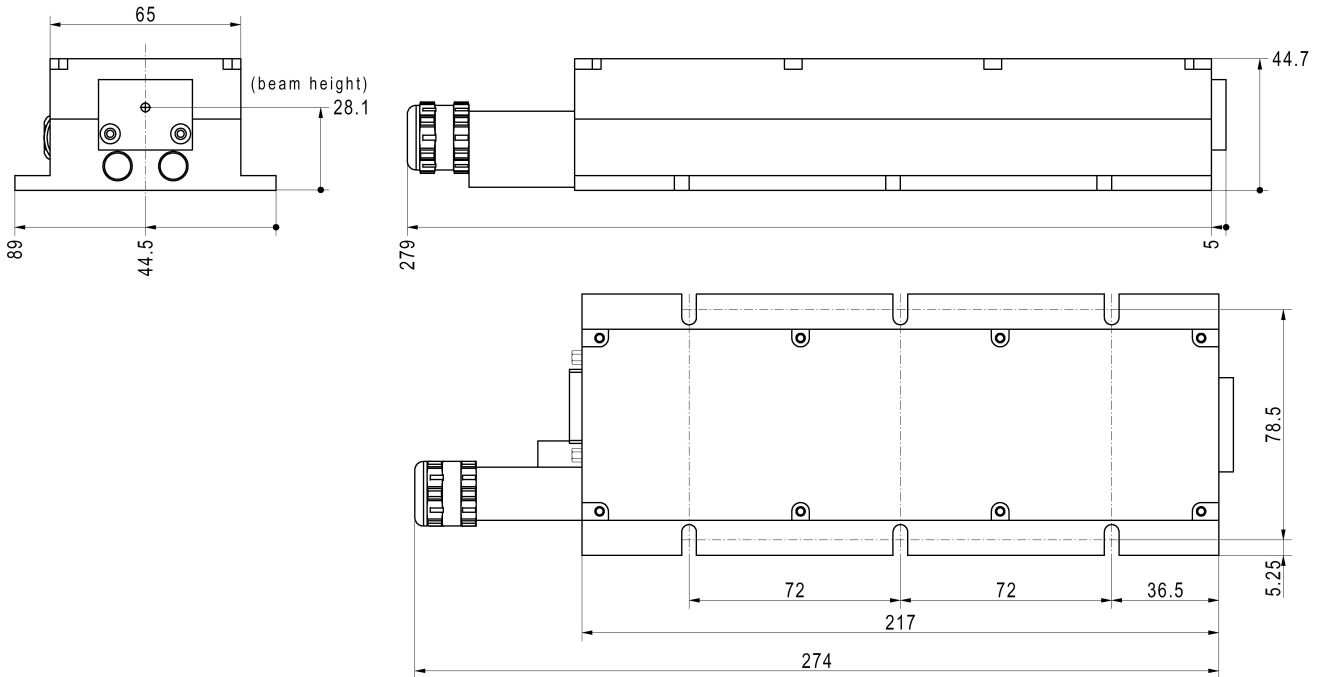
- 1064 nm
- single pulse
- 1.4 - 2 ns
- 1 – 100 Hz (up to 1 kHz optional)
- > 450 µJ



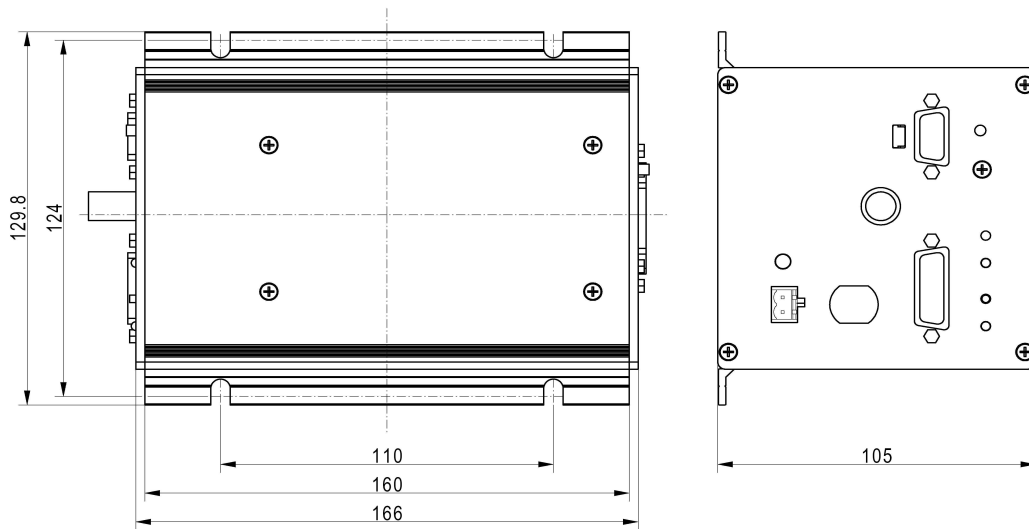
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<b>Optical Data</b>	Wavelength	1064 nm
	Spatial Mode	TEM <sub>00</sub>
	M <sup>2</sup>	< 1.5
	Beam Divergence (full angle)	< 6.5 mrad
	Beam Ellipticity	< 2:1
	Waist Diameter	380 ± 100 µm (located at about 110mm inside the laser head)
	Beam Diameter	650 ± 150 µm (at laser exit)
	Peak Power	220 kW - 325 kW @ 1-100 Hz
	Pulse Energy	>450 µJ @ 1 - 100 Hz (>150µJ @ 1kHz option)
	Pulse Repetition Rate (with external trigger)	1 - 100 Hz, (up to 1 kHz, on request)
	Pulse Width (FWHM)	1.4 ns - 2 ns
	Polarization Ratio	> 100:1, vertical
	Long term pulse energy stability (6 hrs)	< ± 6 %
	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 fiber with core diameter ≥ 100 µm	
	Synchronization signal output (rise time < 2 ns)	
	Manual shutter	
	Upgrade to 1 kHz repetition rate (parameters on request)	
	External telescope (e.g. M=5)	
	Manual attenuator (on request)	
Stand alone system (CDRH compliant)		

## Laser Head and Controller



OEM-Controller



## Laser Safety Labels

The DSS1064-450 lasers are class 3B according to IEC 60825-1:2007

