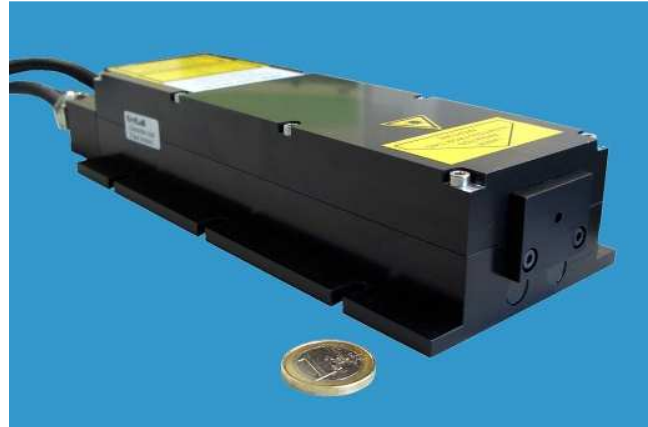


# FTSS 355-300

Diode pumped passively Q-switched solid state laser

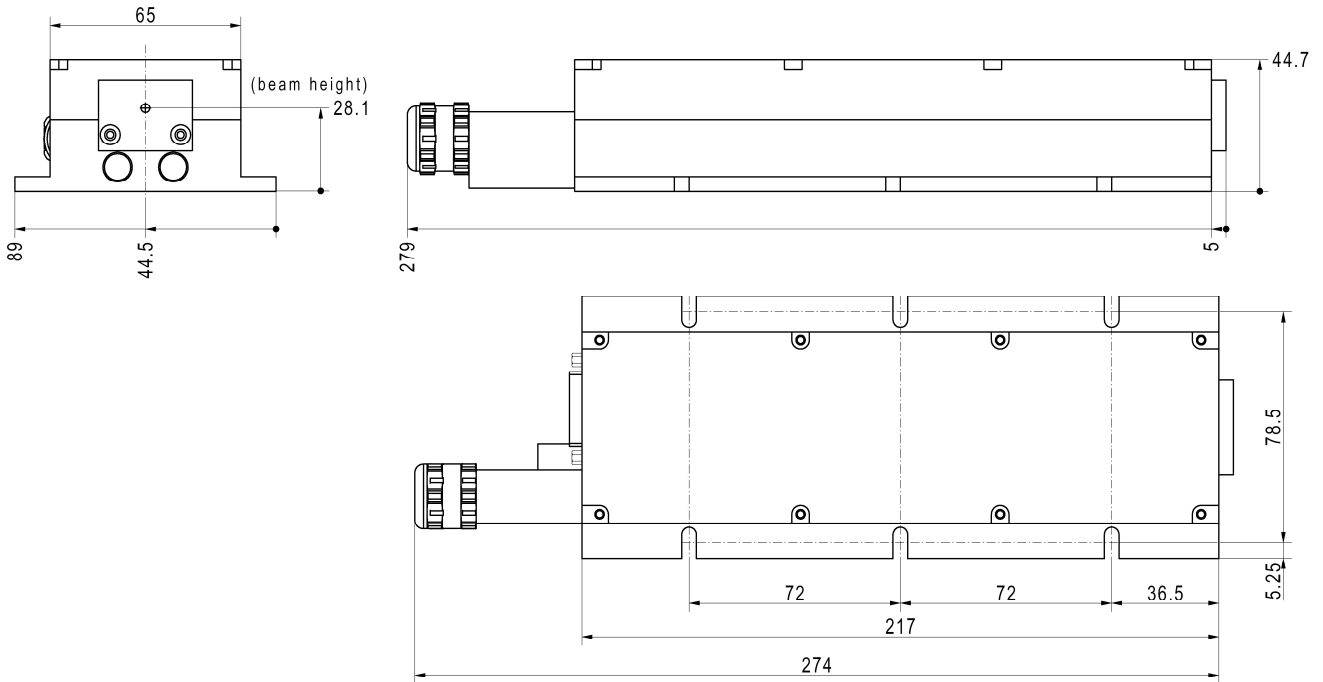
- 355 nm
- single pulse
- < 1.7 ns
- 1 – 80 Hz
- > 300 µJ



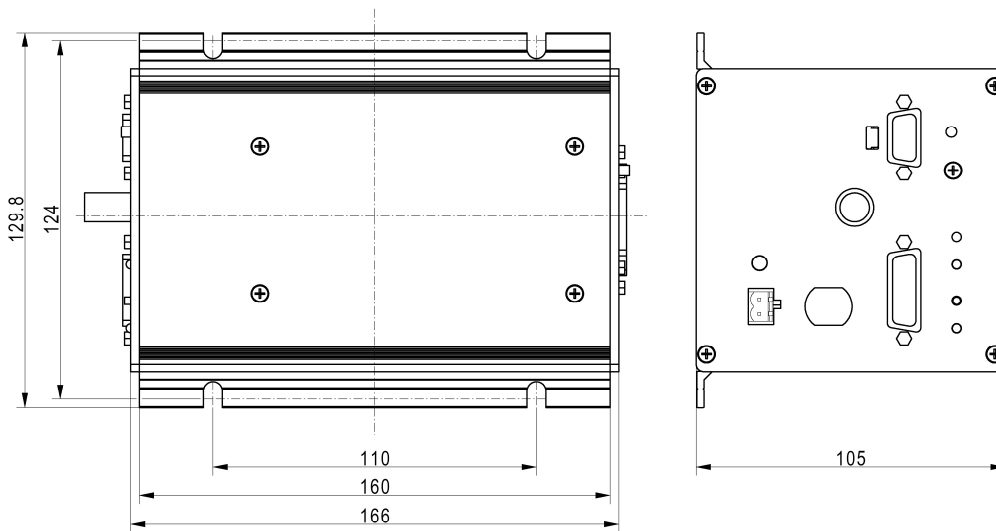
## biology · biomedicine · chemistry · analytics

<b>Optical Data</b>	Wavelength	355 nm
	Beam Divergence (full angle)	< 2.5 mrad
	Beam Ellipticity	< 2:1
	Waist Diameter	500 ± 150 µm (located at about 110 mm inside the laser head)
	Beam Diameter	0.8 ± 0.3 mm (at laser exit)
	Peak Power	> 200 kW @ 20 Hz
	Pulse Energy	> 300 µJ @ 20 Hz
	Pulse Repetition Rate (with external trigger)	1 - 80 Hz
	Pulse Width (FWHM)	< 1.7 ns
	Polarization Ratio	> 100:1, vertical
	Long term pulse energy stability (6 hrs)	< ± 2 %
	Laser Classification	3B / IIIb
	<b>Optical Output</b>	Free Beam
<b>Electrical Data</b>	Electrical Power Consumption	< 150 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>	SMA-connector for fiber with core diameter ≥ 400 µm	
	Synchronization signal output (rise time < 2 ns)	
	Manual shutter	
	Manual or electrical driven wavelength switch 355 nm / 532 nm	
	External telescope (e.g. M=5)	
	Manual attenuator	
	Heat sink with fan (recommended for repetition rates > 50 Hz)	
Stand alone controller (CDRH compliant)		

## Laser Head and Controller

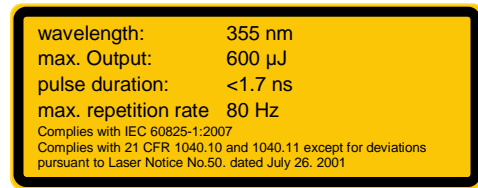
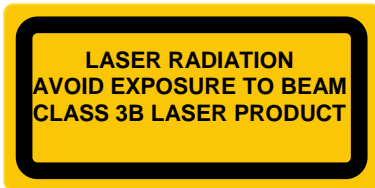


OEM controller



## Laser Safety Labels

The FTSS355-300 lasers are class 3B according to IEC 60825-1:2007



## Typical behavior of the laser energy with different repetition rates

Laser output energy vs. repetition rate  
of the FTSS 355-300 laser system

