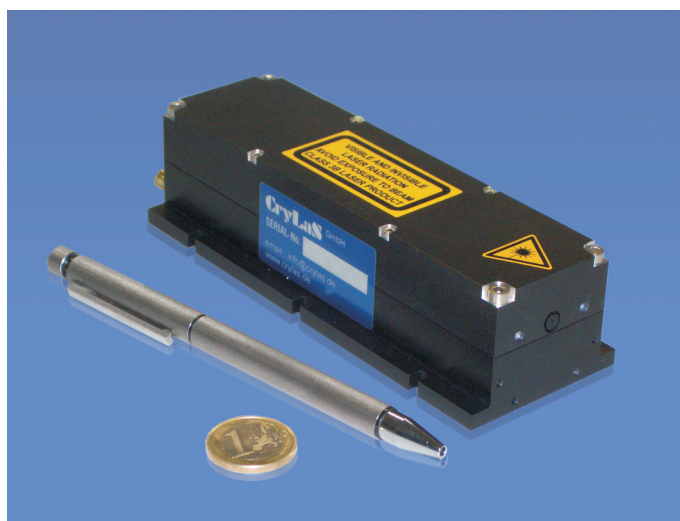


FDSS 532-Q

Diode Pumped Passively Q-Switched Solid State Laser

- **532 nm**
- **Pulsed (typ. 1,2-1,5 ns)**
- **Up to 6 µJ**
- **Up to 15 kHz**
- **External and Internal Trigger Mode**
- **Free Beam or SMA Fiber-Coupling**



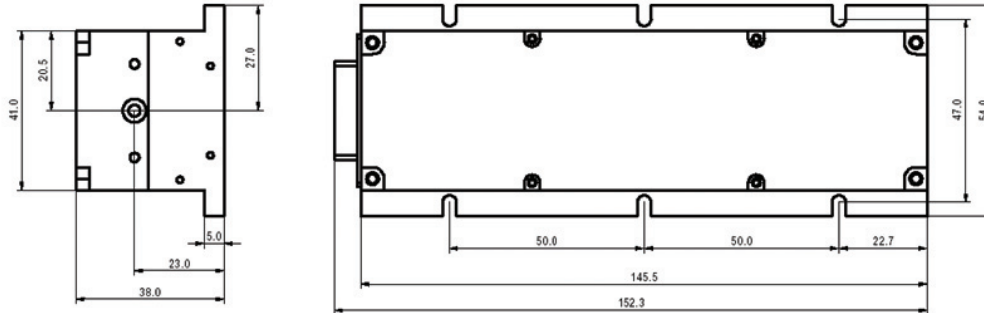
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Optical Data		FDSS532-Q1	FDSS532-Q2
	Wavelength	532 nm	532 nm
	Pulse Energy (@ max. repetition rate)	2 µJ	6 µJ
	Peak Power (@ max. repetition rate)	> 1,3 kW	> 4,0 kW
	Max. Pulse Repetition Rate	15 kHz	10 kHz
	Pulse Width (FWHM)	< 1,5 ns	< 1,5 ns
	Polarization Ratio	> 100:1 vertical	> 100:1 vertical
	Power Stability over 6 hours ¹⁾	< ± 5 %	< ± 3 %
Optical Output	Laser Classification	3B / IIIB	3B / IIIB
	Spatial Mode	TEM ₀₀	TEM ₀₀
	Beam Divergence (full angle)	< 3,5 mrad	< 3,5 mrad
	Beam Diameter at Output Plane	300 ± 100 µm	300 ± 100 µm
Electrical Data	Power Consumption mean (max.)	30 W (60 W)	
	Operating Voltage (OEM)	12...24 V DC	
	Line Voltage (STAND ALONE Version)	90...240 V AC	
Interfaces	RS 232		
	BNC incl. External Trigger (TTL, rising edge) 1Hz ... max. repetition rate		
	SERVICE Interface for TTL-control and power monitor		
Miscellaneous	Warm-up Time	< 5 min	
	Operating Temperature	10 ... 40 °C	
Options	STAND ALONE Version (incl. key-switch, heat-sink, manual shutter)		
	Synchronization Signal Output (rise time < 2 ns)		
	Fiber-Coupling (SMA) for fiber with core diameter > 70 µm		

¹⁾ after 5 min warm up, temperature variation ± 3°C and < 3°C/hour

Dimensions:

Laser Head: 152,3 x 54 x 38mm³



Controller STAND ALONE: 255 x 245 x 95 mm³



Front View

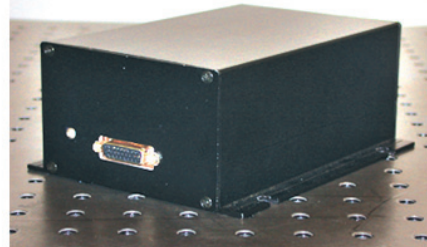


Rear View

Controller OEM: 180 x 130 x 66 mm³



Front View



Rear View

Laser Warning:

The FDSS532-Q lasers are class 3B according to IEC 60825.1



wavelength	max. output	pulse duration
266 nm	$E_{pmax} \approx 0.2 \mu J$	1.0 ns
355 nm	$E_{pmax} \approx 0.3 \mu J$	1.0 ns
532 nm	$E_{pmax} \approx 2.0 \mu J$	< 1.5 ns
1064 nm	$E_{pmax} \approx 5.0 \mu J$	< 2.1 ns
Complies with IEC 60825.1 (October 2003) Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001		

Q1 series

wavelength	max. output	pulse duration
266 nm	$E_{pmax} \approx 1.25 \mu J$	1.0 ns
355 nm	$E_{pmax} \approx 3.0 \mu J$	1.0 ns
532 nm	$E_{pmax} \approx 6.0 \mu J$	< 1.5 ns
1064 nm	$E_{pmax} \approx 15.0 \mu J$	< 2.1 ns
Complies with IEC 60825.1 (October 2003) Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001		

Q2 series