



QSLN532 Series 532nm Passively Q-Switched Laser System up to 125uJ

Overview

The QSLN532 series diode pumped solid state (DPSS) Q-switched laser is ideal for applications that require a wavelength of 532nm and single pulse energy levels up to 125uJ. The laser features a compact design, long lifetime, easy operation, and FDA-compliant system with driver. The laser is widely used in industrial applications, such as marking on highly reflective metals, semiconductors, carbide, rubbers, ceramics, and composites.



Specifications

Model Number		QSLN532-XYPR
Central wavelength (nm)		532±1
Transverse mode		Near TEM ₀₀
Operating mode		Frequency conversion of Q-switched pulsed laser
Average power (mW)		~300 (X=300), ~500 (X=500), ~1000 (X=1W) Average power (mW) = Single pulse energy (µJ) * Rep. rate (kHz)
Single pulse energy (µJ)		50-125
Pulse duration (ns)		~5
Peak power (W)		Peak Power (W) = Single Pulse Energy (µJ) / Pulse Duration (µs)
Repetition rate (kHz)	Fixed	One fixed rep. rate internal between 1kHz-10kHz, such as 1kHz (R=S1), 2kHz (R=S2), 3kHz (R=S3), 4kHz (R=S4), 5kHz (R=S5), 6kHz (R=S6), 7kHz (R=S7), 8kHz (R=S8), 9kHz (R=S9), and 10kHz (R=S10) with stable pulse energy, pulse duration and pulse period.
	External Trigger	Rep. rate in the range of 1kHz-10kHz obtained by external trigger with stable pulse energy, pulse duration and pulse period. (R=C)
	QCW	QCW state with one rep. rate between 1kHz-15kHz. (R=U)
Average power stability (rms, over 4 hours)		<5% (P=A), <3% (P=E)
M ² factor		<1.5
Beam divergence, full angle (mrad)		<2
Beam diameter at aperture (1/e ² , mm)		~0.8
Warm-up time (minutes)		<10
Beam height from base plate (mm)		68.5
Operating temperature (°C)		10-35
Dimensions of laser head (mm)		205(L)x99(W) x94(H) mm ³
Weight of laser head (kg)		2.6 kg
Power supply options		
High Power Elite Power Supply (Y=H)	Input voltage	90-264VAC
	Dimensions	307(L) x150(W) x106(H) mm ³
	Weight	2.9 kg
	Features	Fixed output power
High Power Laboratory Power Supply (Y=M)	Input voltage	90-264VAC
	Dimensions	307(L) x150(W) x106(H) mm ³
	Weight	2.9 kg
	Features	Adjustable output power
Expected lifetime (hours)		10000
Warranty period		10 months
FDA Compliance		FDA CDRH Title 21 CFR 1040.10/11 Class IV

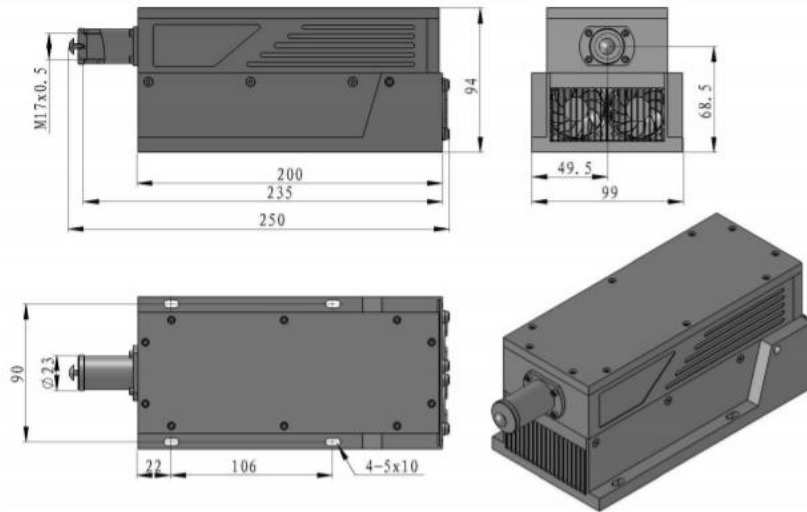
Remarks:

- Specifications of the Q-switched pulsed laser is based on the laser pulsed at the specified repetition rate. If the laser is run at a different repetition rate, the output characteristics may change.



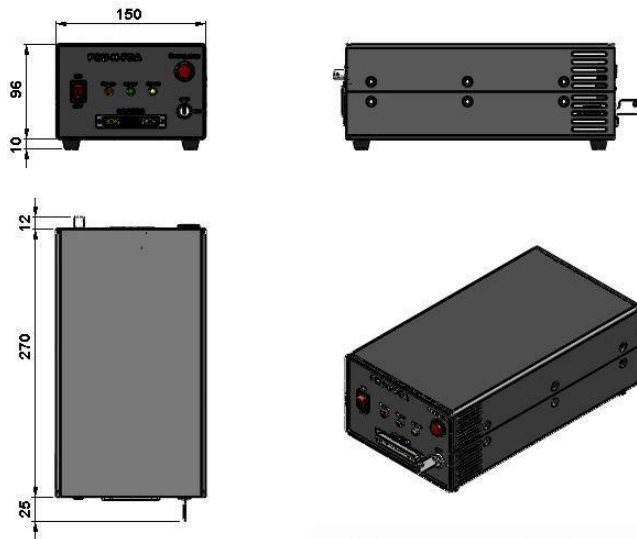
Outline Dimensions (unit: mm)

Laser Head

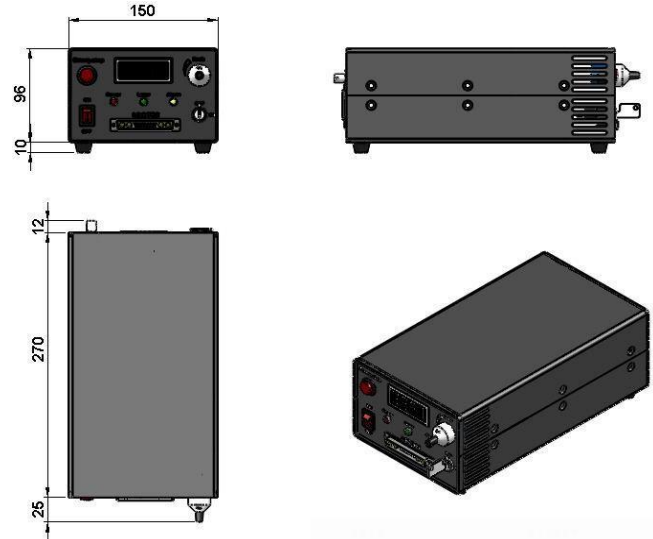


Power Supply Options

High Power Elite Power Supply (Y=H)



High Power Laboratory Power Supply (Y=M)



Note: The above specifications are subject to change without notice.