



## QSLH523 Series 523.5nm Passively Q-Switched Laser System up to 150mW

### Overview

The QSLH523 series diode pumped solid state (DPSS) Q-switched laser is ideal for applications that require a wavelength of 523.5nm and output power levels up to 150mW. The laser features high peak power, high repetition rate, and short pulse duration. The laser is widely used in industry marking on diamond or stone, teaching of nonlinear optics, experiments of generating 350nm or 261 nm laser, fiber communication, and many other applications.



### Specifications

<b>Model Number</b>		<b>QSLH523-XYPR</b>
Wavelength (nm)		523.5±1
Operating mode		Frequency conversion of Q-switched pulsed laser
Average power (mW)		~10 ( <b>X=10</b> ), ~30 ( <b>X=30</b> ), ~50 ( <b>X=50</b> ), ~100 ( <b>X=100</b> ), ~150 ( <b>X=150</b> )
Single pulse energy (µJ)		Single pulse energy (µJ) = Average power (mW) / Rep. rate (kHz)
Average power stability (rms, over 4 hours)		<5% ( <b>P=A</b> ), <3% ( <b>P=E</b> )
Pulse duration (ns)		~4
Peak power (W)		Peak Power (W) = Single Pulse Energy (µJ) / Pulse Duration (µs)
Repetition rate (kHz)	Fixed	One fixed rep. rate internal at 1kHz ( <b>R=S1</b> ) with stable pulse energy, pulse duration and pulse period.
	External Trigger	Rep. rate at 1kHz obtained by external trigger with stable pulse energy, pulse duration and pulse period. ( <b>R=C</b> )
	QCW	QCW state with one rep. rate between 2kHz-3kHz. ( <b>R=U</b> )
Transverse mode		TEM <sub>00</sub>
Beam divergence, full angle (mrad)		<2.0
Beam diameter at aperture (mm)		~3.0
M <sup>2</sup> factor		<1.5
Warm-up time (minutes)		<10
Beam height from base plate (mm)		29
Operating temperature (°C)		10-35
Dimensions of laser head (mm)		154.5(L)×77(W) ×60(H) mm <sup>3</sup>
Weight of laser head (kg)		0.9 kg
Power supply		
High Power Elite Power Supply ( <b>Y=H</b> )	Input voltage	90-264VAC
	Dimensions	236(L) ×145(W) ×104(H) mm <sup>3</sup>
	Weight	2.3 kg
	Notes	Fixed output power
Expected lifetime (hours)		10,000
Warranty period		10 months
FDA Compliance		FDA CDRH Title 21 CFR 1040.10/11 Class IV

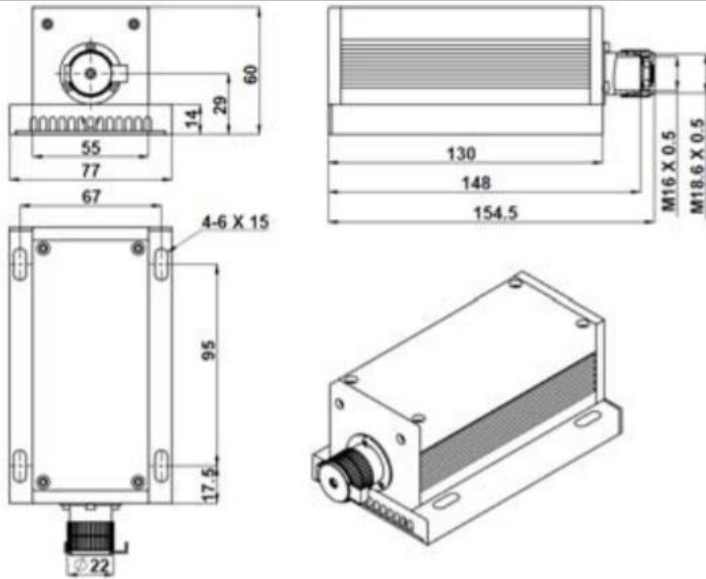
#### Remarks:

- 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.

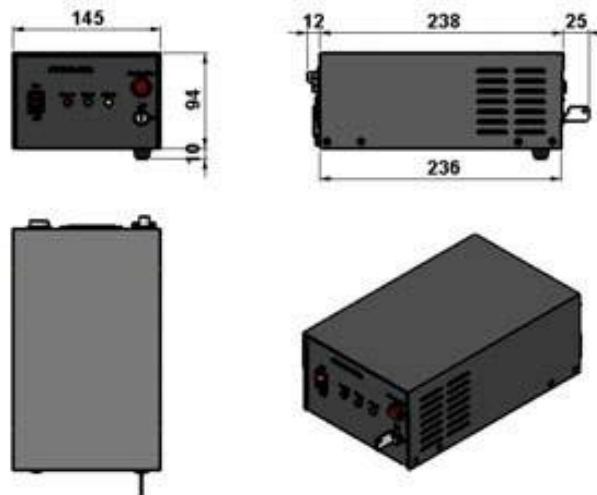


**Outline Dimensions (unit: mm)**

**Laser Head**



**Power Supply**



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