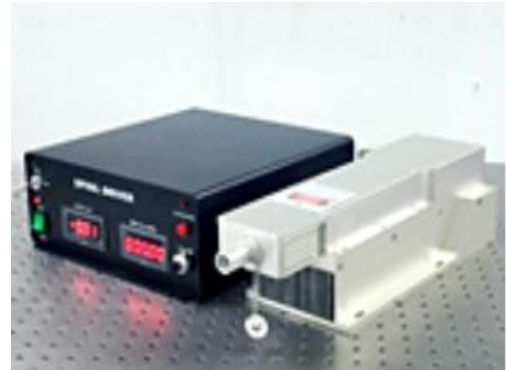




### QAOW946 Series 946nm Actively Q-Switched Laser System up to 150µJ

#### Overview

The QAOW946 series diode-pumped solid-state (DPSS) actively Q-switched AOM (Acousto-Optic Modulation) laser is ideal for applications that require a wavelength of 946nm and single pulse energy levels up to 150µJ. The laser features high peak power, high repetition rate and short pulse duration. The laser is widely used in marking, carving, measurement, research and many other applications.



#### Specifications

<b>Model Number</b>	<b>QAOW946-XP</b>	
Wavelength (nm)	946±1	
Operating mode	Actively Q-switched AOM (Acousto-Optic Modulation)	
Average power (mW)	~100 @ 10kHz ( <b>X=100</b> ), ~300 @ 10kHz ( <b>X=300</b> ), ~500 @ 10kHz ( <b>X=500</b> ), ~800 @ 10kHz ( <b>X=800</b> ), ~1000 @ 10kHz ( <b>X=1W</b> )	~1500 @ 10kHz ( <b>X=1H</b> )
	Average power (mW) = Single pulse energy (µJ) * Rep. rate (kHz)	
Single pulse energy (µJ)	Up to ~150	
Peak power (W)	Peak Power (W) = Single Pulse Energy (µJ) / Pulse Duration (µs)	
Ave power stability (rms, over 4 hours)	<5% ( <b>P=A</b> ), <3% ( <b>P=E</b> ), <2% ( <b>P=2</b> ), <1% ( <b>P=D</b> )	<5% ( <b>P=A</b> ), <3% ( <b>P=E</b> ), <2% ( <b>P=2</b> )
Pulse duration (ns)	Typically ~90 @ 10kHz, varies from power and repetition.	
Repetition rate (kHz)	1-50	
Beam diameter at aperture (1/e <sup>2</sup> , mm)	~2.5	
Beam divergence, full angle (mrad)	<2.0	
Warm-up time (minutes)	<10	
Cooled method	Air cooled	
Beam height from base plate (mm)	93.5	
Operating temperature (°C)	10-35	
Dimensions of laser head (mm)	346(L) x140(W) x125(H) mm <sup>3</sup>	
Weight of laser head (kg)	6.0 kg	
Power supply		
AOM Power Supply ( <b>Y=A</b> )	Input voltage	220/110VAC
	Dimensions	334(L) x300(W) x123(H) mm <sup>3</sup>
	Weight	6.8 kg
Expected lifetime (hours)	10,000	
Warranty	10 months	
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IV	

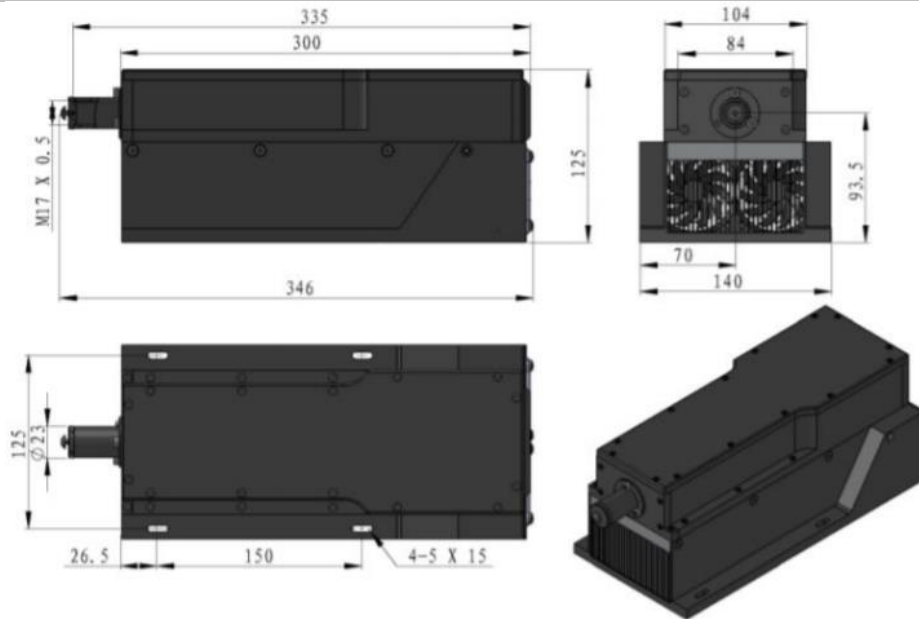
#### Remarks:

- 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.

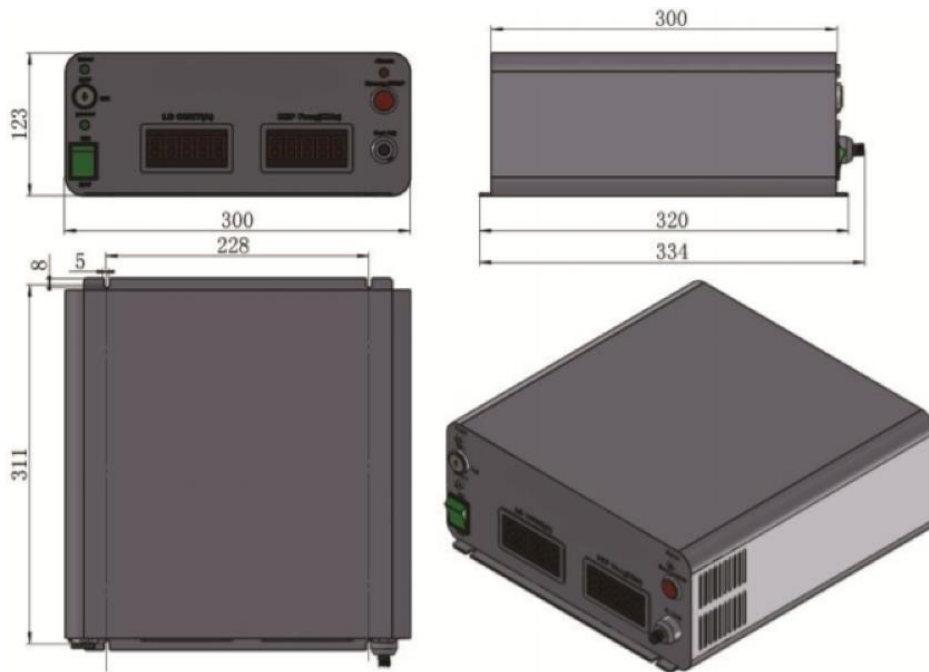


**Outline Dimensions (unit: mm)**

**Laser Head**



**Power Supply**



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