



QAOV457 Series 457nm Actively Q-Switched Laser System up to 50μJ

Overview

The QAOV457 series diode-pumped solid-state (DPSS) actively Q-switched AOM (Acousto-Optic Modulation) laser is ideal for applications that require a wavelength of 457nm and single pulse energy levels up to 50uJ. 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

Model Number	QAOV457-XYP		
Wavelength (nm)	457±1		
Operating mode	Actively Q-switched AOM (Acousto-Optic Modulation)		
Average power (mW)	~100 @ 10kHz (X=100)	~300 @ 10kHz (X=300)	~500 @ 10kHz (X=500)
	Average power (mW) = Single pulse energy (μJ) * Rep. rate (kHz)		
Single pulse energy (μJ)	Up to ~50		
Peak power (W)	Peak Power (W) = Single Pulse Energy (μJ) / Pulse Duration (μs)		
Ave power stability (rms, over 4 hours)	<10% (P=B), <5% (P=A), <3% (P=E)		
Pulse duration (ns)	Typically ~300 @ 10kHz, varies from power and repetition		
Repetition rate (kHz)	1-50		
Beam diameter at aperture (1/e ² , mm)	~1.0		
Beam divergence, full angle (mrad)	<2.5		
Warm-up time (minutes)	<10		
Cooled method	Air cooled		
Beam height from base plate (mm)	113		
Operating temperature (°C)	10-35		
Dimensions of laser head (mm)	430(L) x142(W) x144(H) mm ³		
Weight of laser head (kg)	9.5 kg		
Power supply			
AOM Power Supply (Y=AU)	Input voltage	220/110VAC	
	Dimensions	483.5(L) x454(W) x147.5(H) mm ³	
	Weight	8.3 kg	
Expected lifetime (hours)	10,000		
Warranty	10 months		
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IV		

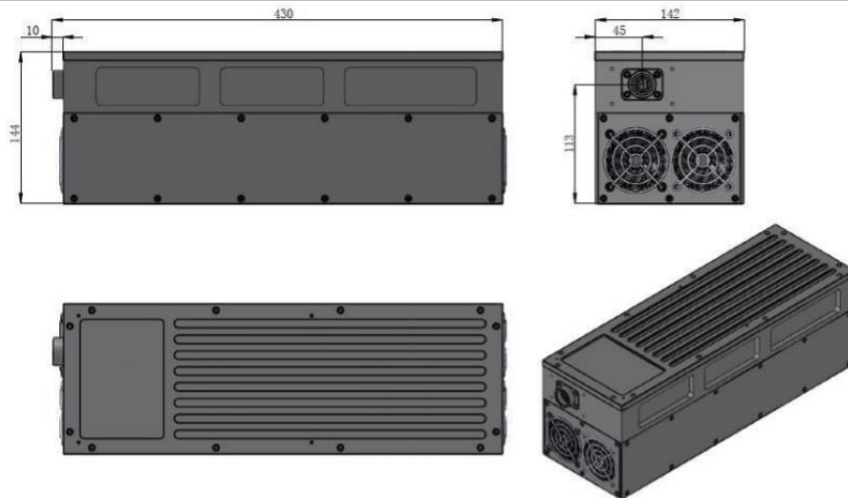
Remarks:

- 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.

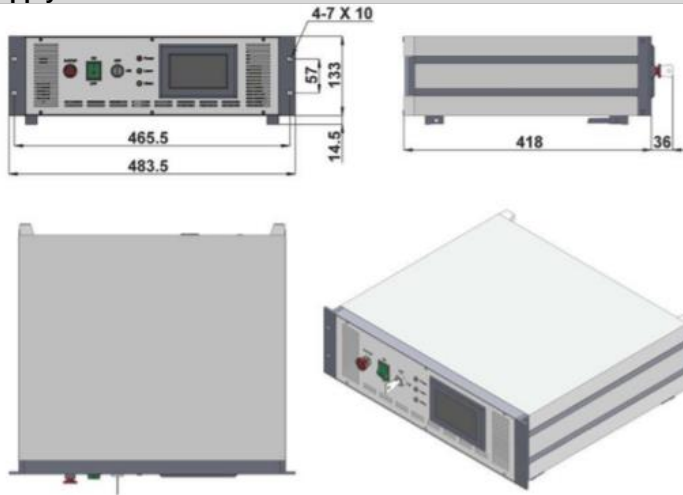


Outline Dimensions (unit: mm)

Laser Head



Power Supply



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