



## TW770R840 Series 770-840nm Wavelength Tunable Air-Cooled Q-Switched Narrow Linewidth Laser System up to 1000mW

### Overview

The TW770R840 series wavelength tunable all-solid-state Q-switched laser is ideal for applications that require a wavelength range of 770-840nm and output power levels up to 1000mW. The laser features narrow linewidth, high repetition rate, and short pulse duration. The laser is widely used in marking, carving, measurement, scientific research, and many other applications.



### Specifications

Model Number	TW770R840P-XZ	TW770R840-XZ	
Tunable wavelength range (nm)	770-840	770-840	
Operating mode	Acousto-Optics Q-switched	Acousto-Optics Q-switched	
Spectral linewidth	<40pm	<2nm	
Average power (mW)	>100 (X=100), >200 (X=200), >400 (X=400)	>100 (X=100), >300 (X=300), >500 (X=500)	>600 (X=600), >800 (X=800), >1000 (X=1W)
Pulse duration (ns)	~25 @ 50kHz and 400mW	~25 @ 50kHz and 1300mW	
Repetition rate (kHz)	10-50	10-50	
Single pulse energy (uJ)	8 @ 50kHz	26 @ 50kHz	
Peak power (kW)	0.32 @ 50kHz	1.1 @ 50kHz	
Power stability (rms, over 4 hours)	<5% (Z=A)	<5% (Z=A)	
Beam diameter at aperture (1/e <sup>2</sup> , mm)	~2		
Beam divergence, full angle (mrad)	<3.5		
Warm-up time (minutes)	<10		
Beam height from base plate (mm)	119		
Operating temperature (°C)	15-35		
Cooled method	Air cooled		
Dimensions of laser head (mm)	449(L)x350(W)x149(H) mm <sup>3</sup>		
Weight of laser head (kg)	21 kg		
Power supply	Input voltage	220/110VAC	
	Dimensions	483.5(L)x454(W)x147.5(H) mm <sup>3</sup>	
	Weight	8.3 kg	
Expected lifetime (hours)	10,000		
Warranty period	10 months		
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IV		

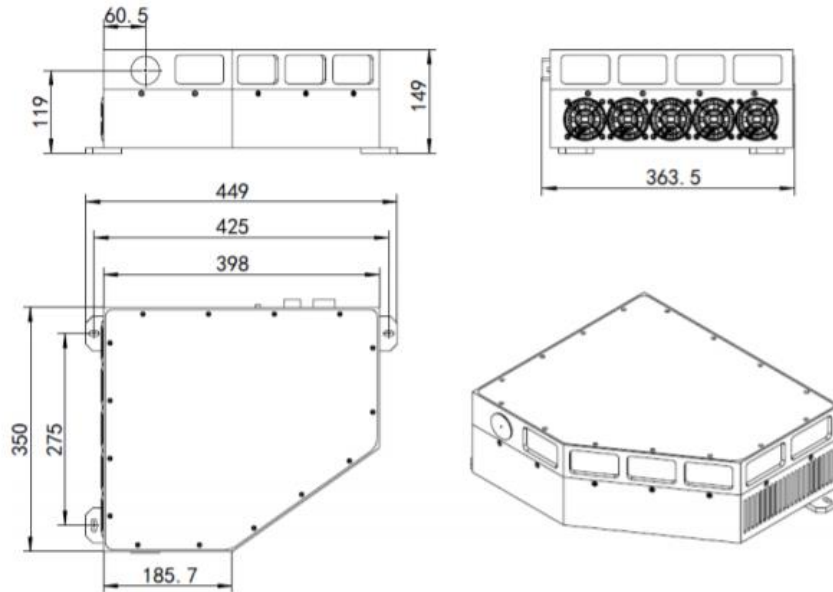
#### Remarks:

- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output power may change when output power is adjusted at a different power level.

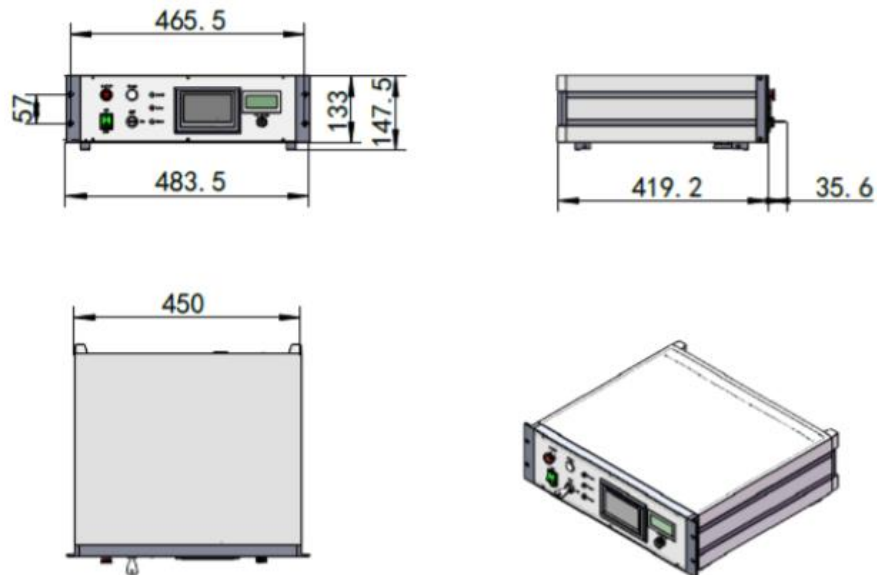


**Outline Dimensions (unit: mm)**

**Laser Head**



**Power Supply**



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