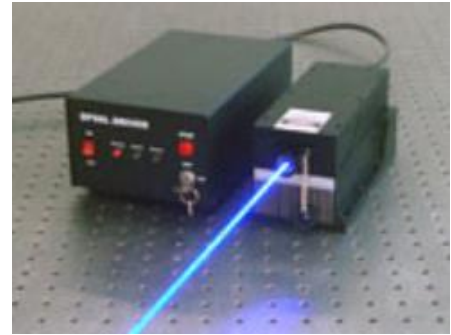




## DPW457 Series 457nm CW DPSS Laser System up to 10W

### Overview

The DPW457 series diode pumped solid state (DPSS) laser is ideal for applications that require a wavelength of 457nm and output power levels up to 10000mW. The laser features a compact design, long lifetime, easy operation, and FDA-compliant system with driver. The laser is widely used in fluorescence sensors, Raman spectrum, laser printing, holography, laser display, submarine communication, biomedicine, laser lighting show, and many other applications.



### Specifications

<b>Model Number</b>	<b>DPW457-XYZQ</b>	
Wavelength (nm)	457±1	
Output power (mW)	>3000 ( <b>X=3W</b> ), >4000 ( <b>X=4W</b> ), >5000 ( <b>X=5W</b> ), >8000 ( <b>X=8W</b> ), >10000 ( <b>X=10W</b> )	
Transverse mode	Near TEM <sub>01</sub>	
Operating mode	CW	
Power stability (rms, over 4 hours)	<10% ( <b>Z=B</b> ), <5% ( <b>Z=A</b> ), <3% ( <b>Z=E</b> )	
Beam diameter at aperture (1/e <sup>2</sup> , mm)	~4.0	
Beam divergence, full angle (mrad)	<2.0	
Polarization ratio	>100:1	
Warm-up time (minutes)	<10	
Beam height from base plate (mm)	93.5	
Operating temperature (°C)	10-35	
Dimensions of laser head (mm)	344.5(L)×140(W) ×124.3(H) mm <sup>3</sup>	
Weight of laser head (kg)	5.7 kg	
Power supply options		
High Power W Version Elite Power Supply ( <b>Y=W</b> )	Input voltage	90-264VAC
	Dimensions	307(L) ×168(W) ×123(H) mm <sup>3</sup>
	Weight	4.5 kg
	Notes	Fixed output power
High Power W Version Laboratory Power Supply ( <b>Y=N</b> )	Input voltage	90-264VAC
	Dimensions	336(L) ×168(W) ×133(H) mm <sup>3</sup>
	Weight	4.6 kg
	Notes	Adjustable output power
Modulation option	None ( <b>Q=0</b> )	
	TTL	1Hz-1kHz ( <b>Q=T1</b> ), 1kHz-10kHz ( <b>Q=T2</b> ), 10kHz-30kHz ( <b>Q=T3</b> )
	Analog	1Hz-1kHz ( <b>Q=A1</b> ), 1kHz-10kHz ( <b>Q=A2</b> ), 10kHz-30kHz ( <b>Q=A3</b> )
Expected lifetime (hours)	10,000	
Warranty period	10 months	
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IV	

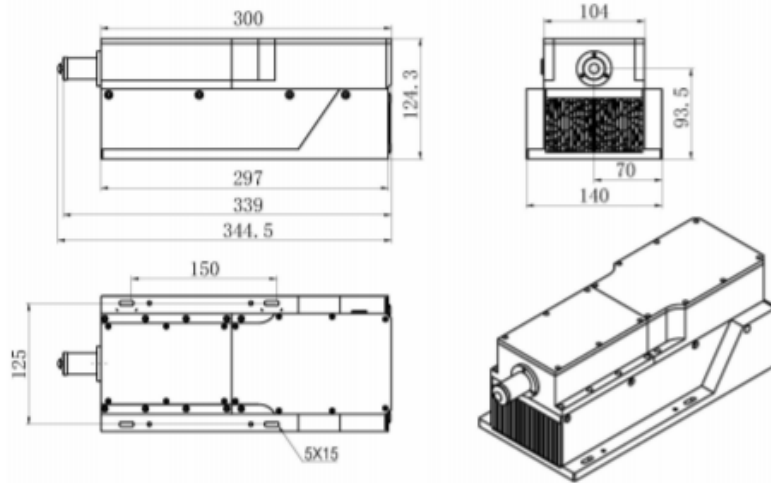
Remarks:

- 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.



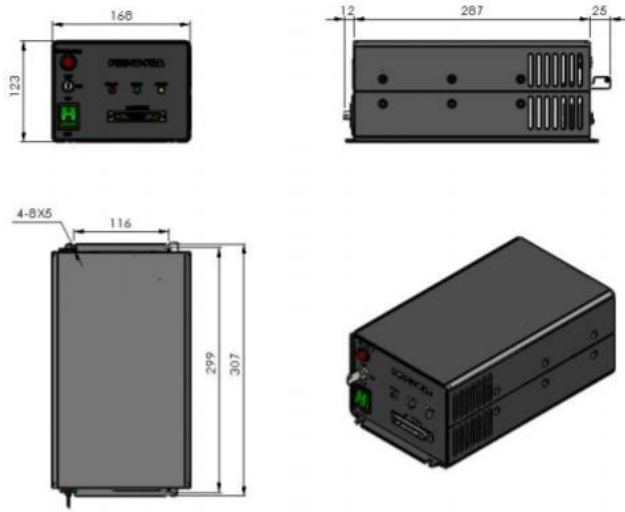
**Outline Dimensions (unit: mm)**

**Laser Head**



**Power Supply Options**

**High Power W Version Elite Power Supply (Y=W)**



**High Power W Version Laboratory Power Supply (Y=N)**



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