



## DPNU671 Series 671nm Narrow Linewidth Low Noise DPSS Laser System up to 500mW

### Overview

The DPNU671 series diode pumped solid-state (DPSS) laser is ideal for applications that require a wavelength of 671nm and output power levels up to 500mW. The laser features narrow spectral linewidth, low noise, high stability, ultra-compact design, long operating lifetime, and FDA-compliant system with driver. The laser is widely used in scientific experiment, medical measurement, instrument, spectrum analysis, and many other applications.



### Specifications

<b>Model Number</b>		<b>DPNU671-XYZLA</b>	
Wavelength (nm)		671±1	
Output power (mW)		>50 ( <b>X=50</b> ), >100 ( <b>X=100</b> ), >200 ( <b>X=200</b> ), >300 ( <b>X=300</b> )	>400 ( <b>X=400</b> ), >500 ( <b>X=500</b> )
Transverse mode		TEM <sub>00</sub>	
Operating mode		CW	
Power stability (rms, over 4 hours)		<3% ( <b>Z=E</b> ), <2% ( <b>Z=2</b> ), <1% ( <b>Z=D</b> )	<3% ( <b>Z=E</b> ), <2% ( <b>Z=2</b> )
Spectral linewidth (nm)		<0.003 ( <b>L=J</b> )	
Noise of amplitude (rms, 1Hz-20MHz)		<0.5% ( <b>A=L</b> ), <1% ( <b>A=1</b> )	
M <sup>2</sup> factor		<1.2	
Beam diameter at aperture (1/e <sup>2</sup> , mm)		0.70±0.05	
Beam divergence, full angle (mrad)		<1.5	
Polarization ratio		>100:1 Horizontal ±5 degree	
Warm-up time (minutes)		<10	
Pointing stability after warm-up (mrad)		<0.05	
Beam height from base plate (mm)		27.4	
Laser head consumption (W)		15 (typical), <25 (40°C)	
Max laser head base plate temperature (°C)		50	
Operating temperature (°C)		10-40	
Dimensions of laser head (mm)		142.5(L)×60(W) ×50(H) mm <sup>3</sup>	
Weight of laser head (kg)		1.0 kg	
Power supply			
High Power Elite Power Supply ( <b>Y=H</b> )	Input voltage	90-264VAC	
	Dimensions	275(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	

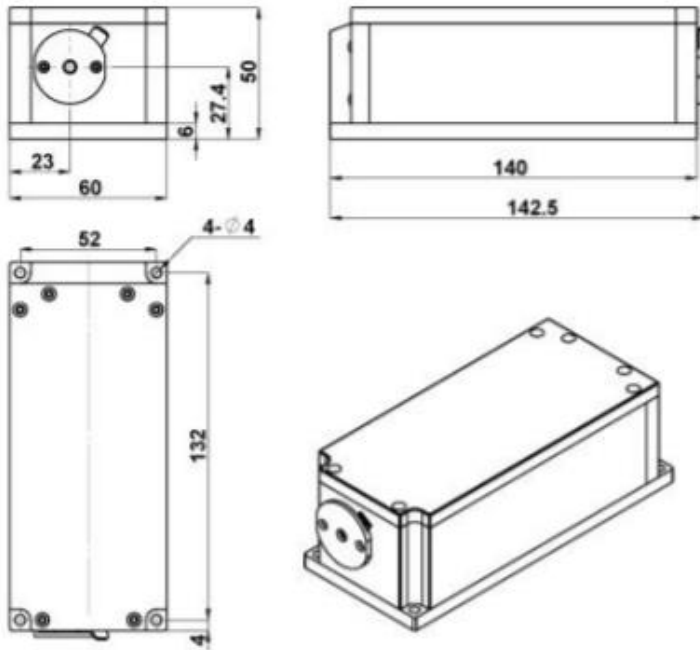
#### Remarks:

- The laser head needs to be used on a heat sink with good heat dissipation.
- 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.

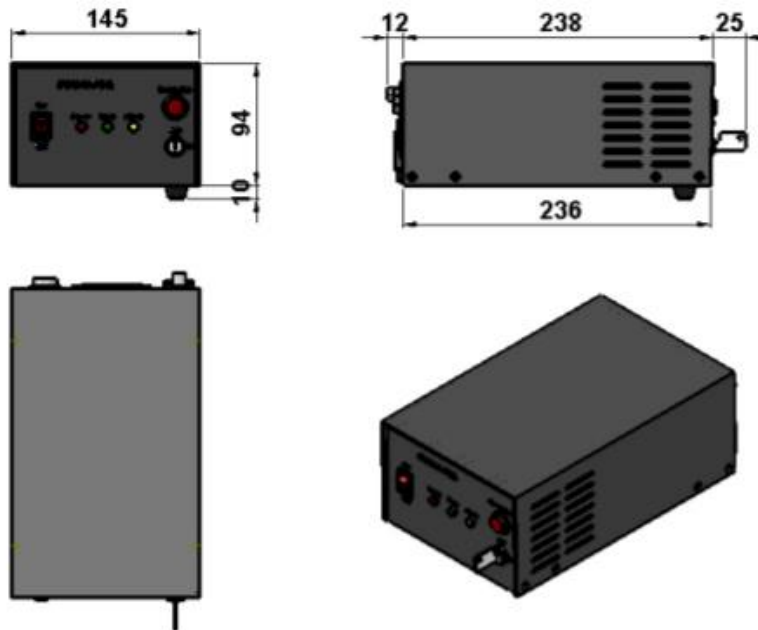


**Outline Dimensions (unit: mm)**

**Laser Head**



**Power Supply**



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