

High performance CW ultra-low noise SLM DPSS lasers

The Cobolt 05-01 lasers are continuous-wave diode-pumped solid-state laser devices operating at a fixed wavelengths. The lasers are built using proprietary HTCure™ manufacturing technology for ultra-robustness into a compact hermetically sealed package. The lasers emit a very high quality laser beam with stable characteristics over a wide range of operating conditions. Single-longitudinal mode operation provides a narrow spectral bandwidth and long coherence length. The laser is designed and manufactured to ensure a high level of reliability.

The Cobolt 05-01 lasers are intended for stand-alone use in laboratory environment or for integration as OEM component in equipment for applications including fluorescence microscopy, flow cytometry, DNA sequencing, HCA, Raman spectroscopy, holography and particle analysis.



Full specifications can be found in the manual. Subject to change without notice. Rev 1011

Specifications

	Zouk	Samba	Rumba
Wavelength [nm]	354.8 ± 0.3	532 ± 0.3	1064 ± 0.6
Power [mW]	10	500, 1000	500, 1000, 2000
Beam divergence (full angle)	<0.8 mrad	<1.2 mrad	<1.6 mrad
Noise, 20 Hz - 20 MHz (pk-pk)	<2%	<1%	<1%
Noise, 20 Hz - 20 MHz (rms)	<0.2%	<0.1%	<0.1%
Beam diameter at aperture	700 μm	700 μm	1.0 mm
Long-term stability (8 hr)	<2% (±3°C)		
Spectral linewidth	<1 MHz (<0.01 pm)		
Spatial mode	TEM ₀₀ M ² <1.1		
Beam pointing stability (10-40 °C)	<10 μrad/°C, typical 5 μrad/°C		
Polarization ratio (vertical)	>100:1		
Total system power consumption	<66 W, typical <30 W		
Operating temperature	10-40°C		
Maximum laser head baseplate temp.	50°C		
Recommended heat sink thermal resistance	0.2 K/W		
Laser head dimensions [mm]	125 x 70 x 45		
[inches]	5.0 x 2.8 x 1.8		
Controller dimensions [mm]	190 x 72 x 28		
[inches]	7.6 x 2.9 x 1.1		
Communication	RS-232 or USB		
Model number structure	wavel-05-01-pwr-500 (CDRH: Keyswitch for on/off) wavel-05-01-pwr-600 (OEM: Auto-start mode)		

Options & Accessories

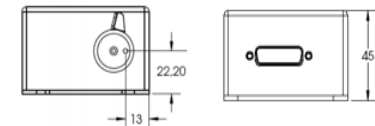
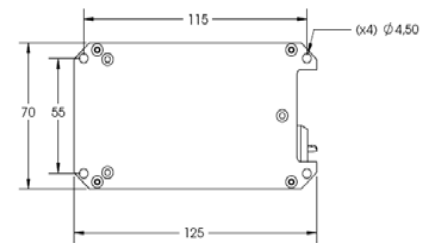
- RS-232 communication cable
- Laser head heatsink
- Mount for external fiber coupling



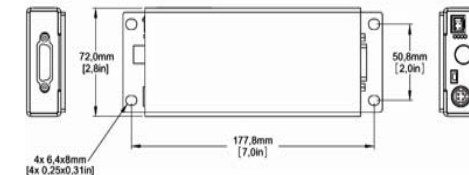
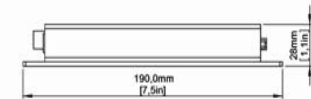
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Laser head



Controller



LASER LIGHT
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT

>500 mW 400-700 nm CW
CLASSIFIED PER IEC 60825, Ed 1.2, 2001-08



LASER LIGHT
AVOID EXPOSURE TO BEAM
CLASS 3B LASER PRODUCT

<500 mW 315-400 nm CW
CLASSIFIED PER IEC 60825, Ed 1.2, 2001-08