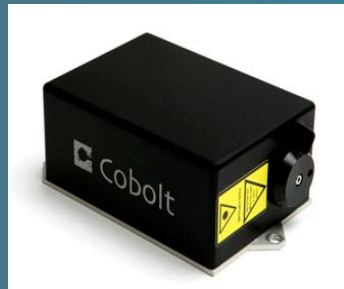


## High performance CW single longitudinal mode DPSS lasers

The Cobolt 04-01 lasers are continuous-wave diode-pumped solid-state laser devices operating at a fixed wavelengths between 457–594 nm. 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 04-01 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.



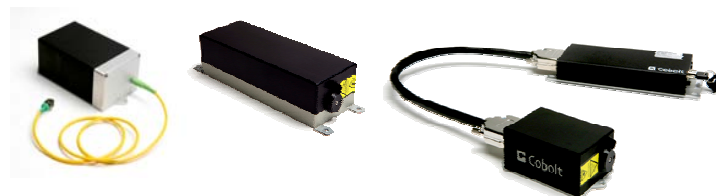
Full specifications can be found in the manual. Subject to change without notice. Rev 1006.

## Specifications

	Wavelength [nm]	Power [mW]
Cobolt Twist™	457 ± 0.3	25, 50
Cobolt Blues™	473 ± 0.3	25, 50
Cobolt Calypso™	491.5 ± 0.3	25, 50, 75, 100
Cobolt Dual Calypso™	491.5+532 ± 0.3	20+20, 50+50
Cobolt Fandango™	515 ± 0.3	25, 50, 100
Cobolt Samba™	532 ± 0.3	25, 50, 100, 150, 300
Cobolt Jive™	561 ± 0.3	25, 50, 75, 100, 150
Cobolt Mambo™	594 ± 0.3	25, 50, 100
Spectral linewidth	<1 MHz (<0.01 pm)	
Spatial mode	TEM <sub>00</sub> M <sup>2</sup> <1.1	
Beam diameter at aperture	700 μm	
Beam divergence (full angle)	<1.2 mrad	
	Twist, Blues, Fandango, Samba, Jive:	Calypso, Mambo:
Noise, 20 Hz - 20 MHz (pk-pk)	<2%, typical <1.5%	<3%, typical <2%
Noise, 20 Hz - 20 MHz (rms)	<0.25%, typical <0.15%	<0.3%, typical <0.2%
Long-term stability (8 hr)	<2% (±3°C)	<3% (±3°C)
Beam pointing stability (over 10–40 °C)	<10 μrad/°C, typical 5 μrad/°C	
Polarization ratio	>100:1	
Total system power consumption	<35 W, typical <15 W	
Operating temperature	10–40°C	
Maximum laser head baseplate temp.	50°C	
Recommended heat sink thermal resistance	0.5 K/W	
Laser head dimensions [mm]	103 x 60 x 40	
[inches]	4.1 x 2.4 x 1.6	
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-04-01-pwr-300 (CDRH: Keyswitch for on/off) wavel-04-01-pwr-400 (OEM: Auto-start mode)	

## Options & Accessories

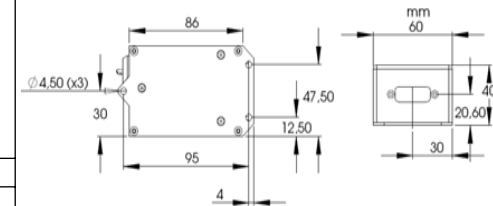
- Customized interface cable
- RS-232 communication cable
- Permanent SM/PM fiber pigtailling
- Laser head heatsink
- Mount for external fiber coupling
- Two lasers in one with Dual Combiner



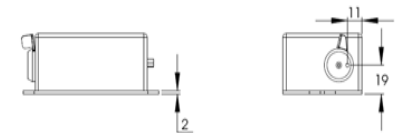
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info@cobolt.se

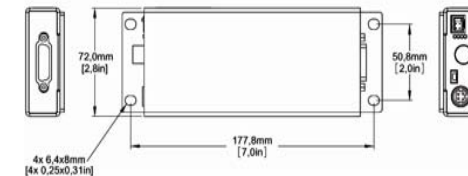
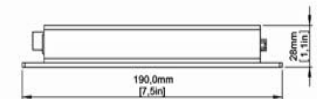
### Laser head



### Laser Beam



### Controller



**LASER LIGHT**  
AVOID EXPOSURE TO BEAM  
CLASS 3B LASER PRODUCT  
  
<100 mW 515 nm CW  
CLASSIFIED PER IEC 60825, Ed 1.2, 2001-08



Class 3B (IEC60825-1), IEC60950-1, UL 60950-1