

Cobolt Dual Combiner

A permanently aligned combination of any 2 wavelengths in a compact package

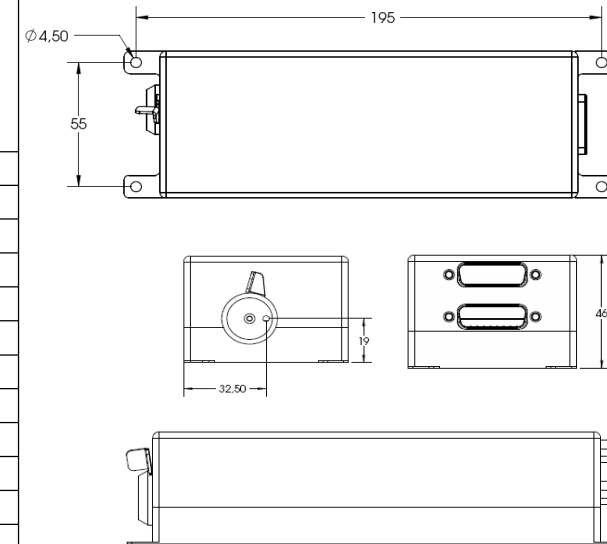
The Cobolt Dual Combiner is a unit which offers any combination of two 04-01 model lasers at any power level in a permanently aligned package. The extreme robustness of the 04-01 models and proprietary HTCure™ manufacturing technology allows Cobolt to offer the Dual Combiner with excellent beam overlap and beam pointing stability.

The Cobolt Dual Combiner is intended for use in a laboratory environment as a drop-in replacement to Ar+ & Kr+ gas lasers or for integration as OEM component module for use in demanding bio-analytical applications such as flow cytometry, laser scanning cytometry, DNA sequencing and confocal microscopy.

Specifications

Suitable for combining 04-01 laser models 457nm-594nm:	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 Fandango™	515 ± 0.3	25, 50, 100, 150
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 ₀₀ M ² <1.1	
Beam diameter at aperture	700 μm	
Beam divergence (full angle)	<1.2 mrad	
Beam overlap	<250 urad	
Long-term stability (8 hr)	<3% (±3°C)	
Beam pointing stability (over 10-40 °C)	<25 μrad/°C	
Polarization ratio (linear)	>100:1, vertical	
Total system power consumption	<70 W, typical <30 W	
Operating temperature	10-40°C	
Recommended heat sink thermal resistance	0.5 K/W	
Dual Combiner dimensions [mm]	190 x 65 x 46	
[inches]	7.6 x 2.6 x 1.8	
Controller dimensions [mm]	190 x 72 x 28	
[inches]	7.6 x 2.9 x 1.1	
Communication	RS-232	
Model number structure	DC-wavel1 wavel2-pwr1 pwr2-300 (CDRH: with keyswitch) DC-wavel1 wavel2-pwr1 pwr2-400 (OEM: Auto-start mode)	

Dimensions



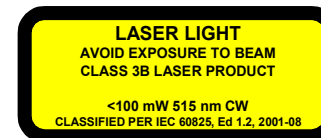
Options & Accessories

- Customized interface cable
- RS-232 communication cable
- Mounting block for permanent SM/PM fiber coupling



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