

594 nm DPSSL, single-longitudinal mode (SLM) 25–50 mW CW

Cobolt Mambo™ is a continuous-wave diode-pumped solid-state laser device operating at a fixed wavelength of 594 nm and built using proprietary HTCure™ manufacturing technology. The laser has a compact hermetically sealed package and emits a 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 Mambo™ laser is intended for stand-alone use in laboratory environment or for integration as OEM component in equipment for applications including confocal microscopy, flow cytometry, laser scanning cytometry, and DNA sequencing.



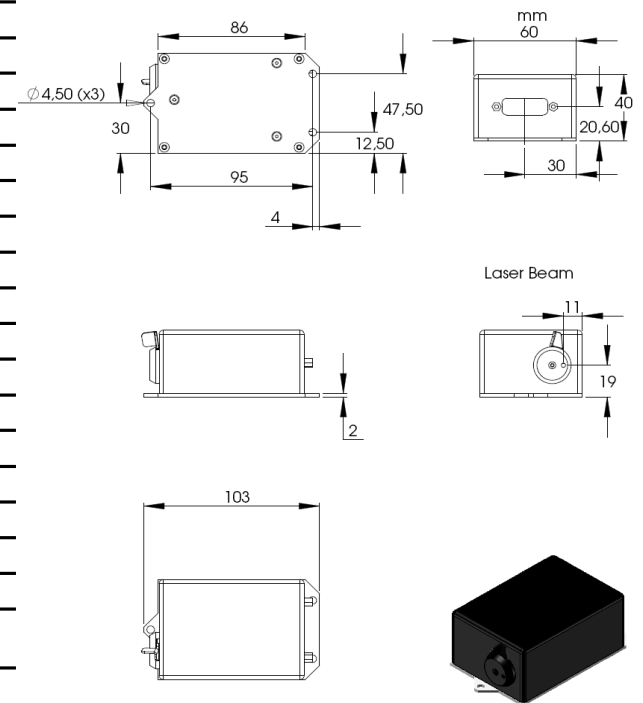
Specifications

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|---|---|
| Wavelength | 594 nm |
| Output power | 25, 50 mW |
| Spectral linewidth | <30 MHz (<0.03 pm) |
| Spatial mode | TEM ₀₀ , M ² <1.1 |
| Beam diameter at aperture | 700 μm |
| Beam divergence (full angle) | <1.3 mrad |
| Noise, 10 Hz –2 MHz (pk-pk) | <3% , typical <2% |
| Noise, 10 Hz –2 MHz (rms) | <0.3% , typical <0.2% |
| Long-term stability (8 h) | <3% (±1.5%) |
| Beam pointing stability (over 10–40 °C) | <10 μrad/°C |
| Polarization ratio | >100:1 linear |
| Total system power consumption | <25 W, typical <15 W |
| Operating temperature | 10–40°C |
| Laser head dimensions [mm] | 95 x 60 x 40 |
| Laser head dimensions [inches] | 3.8 x 2.4 x 1.6 |
| Controller (OEM/CDRH) dimensions [mm] | 190 x 72 x 28 |
| Controller (OEM/CDRH) dimensions [inches] | 7.6 x 2.9 x 1.1 |
| Model number | 0594-04-01-0pwr-300 CDRH 0594-04-01-0pwr-400 OEM |

Options & Accessories

- Laser heatsink
- Fiber coupling
- Customised interface cable
- RS-232 communication cable

Laser Head Dimensions



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

Full specifications can be found in the manual. Subject to change without notice. Rev 0509.