



## Press Release – effective immediately

### Cobolt Samba™ 05-01: Up to 1W CW at 532 nm with ultra-low noise from compact package

Cobolt AB, Swedish manufacturer of high performance DPSS lasers, announces the release of a new platform for single-frequency and ultra-low noise CW lasers, capable of generating up to 1W CW output power at 532 nm from a very compact package. The new Cobolt Samba™ provides a significant step in the process of bringing advanced scientific applications, such as high resolution Raman spectroscopy, interferometry, flow dynamics, high-speed fluorescence analysis and laser pumping, to an industrial level. Available on the same platform is also the Cobolt Zouk™ with 10 mW CW at 355 nm.

The Cobolt Samba™ 05-01 is a continuous-wave single-frequency DPSS laser operating at 532 nm with up to 1W output power in a perfect quality TEM<sub>00</sub> beam ( $M^2 < 1.1$ ). A new proprietary cavity design provides ultra-low noise performance of typically  $< 0.1\%$  rms (over 20 Hz–20MHz and over 10–40°C) and a narrow spectral linewidth of  $< 1$  MHz. The use of Cobolt's PPKTP frequency conversion technology in the laser design also provides unmatched power efficiency. The full laser system consumes less than 66W power.

The laser is manufactured using Cobolt's proprietary HTCure™ Technology in a compact and hermetically sealed package (115x70x45 mm), which provides a very high level of immunity to varying environmental conditions and exceptional reliability. Lasers built using the HTCure™ Technology have shown to withstand multiple 60G mechanical shocks in operation without any sign of degraded performance. They can be exposed to extreme temperatures ( $> 100^\circ\text{C}$ ), and are insensitive to pressure and humidity.

The single-frequency feature of the laser, combined with the high output power, an excellent long-term wavelength stability ( $< 2$  pm) and an ultra-clean spectrum makes the Cobolt Samba™ 05-01 perfectly suited for very demanding applications such as high-resolution Raman spectroscopy, interferometry, flow dynamics, high-speed fluorescence analysis and laser pumping. The compact size and robust package of the laser opens up new possibilities to bring advanced scientific applications to an industrial level.

The laser is supplied with a compact controller (CDRH or OEM) which can be remotely accessed for operation and monitoring of the laser system over digital (RS-232) or analog interfaces.

#### About Cobolt AB

Cobolt supplies compact and efficient high performance DPSS lasers in the UV, visible and near IR regions, for stand-alone use or OEM integration in equipment for fluorescence analysis, Raman spectroscopy, interferometry and range finding. The Cobolt lasers are based on PPKTP for efficient frequency conversion and are manufactured in a compact and robust hermetically sealed package using proprietary HTCure™ Technology that provides outstandingly high tolerance to demanding environmental conditions and ensured lifetime. Cobolt is based in Stockholm, Sweden.

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