**MKS Unveils Compact UV Laser for Bio-instrumentation**

**New Vanguard One Laser Features Low-Noise, Air-cooled Operation**

**Andover, MA – June 20, 2023** – [MKS Instruments, Inc](http://mksinst.com/). (NASDAQ: MKSI) introduces its [Spectra-Physics](http://www.spectra-physics.com/)® Vanguard™ One™ UV125, a compact, all-in-one, quasi-CW laser delivering >125 mW of UV power. The new laser operates air-cooled with low noise of <1% rms and delivers long-operating life and low cost of ownership. Vanguard One is ideal for applications in bio-instrumentation including flow cytometry, microscopy, and cell sorting, as well as semiconductor wafer inspection.

"Vanguard One is an exceptional solution to address the demanding UV laser requirements of bio-instrumentation and industrial applications," stated Jürgen Niederhofer, general manager for Spectra-Physics lasers in Europe. "Building on our decades of experience and proven technology used in the semiconductor market, this new laser delivers the performance and reliability needed for bio-instrumentation in a single compact, air-cooled unit."

Based on the highly successful Vanguard laser family, VanguardOne UV125 is an all-in-one laser, combining electronics, laser cavity, and cooling in a single housing for ease of integration and bench-top tools. The quasi-CW operation ensures high fluorescence signal-to-noise ratio while preventing damage to cells in bio-instrumentation. The laser firmware enables closed-loop power control, ensuring long-term stability with less than 2% power variation for consistent measurement results. Vanguard One lasers pass extensive environmental qualification testing to deliver high reliability and low cost-of-ownership needed for bio-instrumentation and demanding industrial applications.

The new Spectra-Physics Vanguard One UV125 laser will be displayed at Laser World of Photonics, Messe München, Munich, Germany, June 27-30, 2023. Please visit MKS at booth A3.219 for a demonstration. For further details, please visit [www.spectra-physics.com/vanguard-one](http://www.spectra-physics.com/vanguard-one).

Spectra-Physics is a registered trademark, and Vanguard™ and One™ are trademarks of MKS Instruments, Inc., or a subsidiary of MKS Instruments, Inc.

**About MKS**

MKS Instruments, Inc. (NASDAQ: MKSI) enables technologies that transform our world. We deliver foundational technology solutions to leading edge semiconductor manufacturing, electronics and packaging, and specialty industrial applications. We apply our broad science and engineering capabilities to create instruments, subsystems, systems, process control solutions and specialty chemicals technology that improve process performance, optimize productivity, and enable unique innovations for many of the world’s leading technology and industrial companies. Our solutions are critical to addressing the challenges of miniaturization and complexity in advanced device manufacturing by enabling increased power, speed, feature enhancement, and optimized connectivity. Our solutions are also critical to addressing ever-increasing performance requirements across a wide array of specialty industrial applications. Additional information can be found at [www.mks.com](https://www.globenewswire.com/Tracker?data=8izqfRLPENnjqt98MJWgmP4hWP6y2BgU1PTXCDAC9hCuE_bs7LDpkXvhy_P2_jxM-p5a-lNFd6Wc-BQfr68qvQ==).

**About Spectra-Physics Business Unit**

Spectra-Physics is a brand within the MKS Instruments Photonics Solutions division. The Spectra-Physics product portfolio consists of a broad spectrum of lasers for precision industrial and scientific research applications. Spectra-Physics products combine groundbreaking laser technologies with deep applications expertise to deliver disruptive performance and lower total cost of ownership. From the manufacturing floor and semiconductor fab to the research laboratory, Spectra-Physics lasers enhance our customers’ capabilities and productivity in the semiconductor, electronics and packaging, and specialty industrial markets. For more information, visit [www.spectra-physics.com](http://www.spectra-physics.com).

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