

PRESS RELEASE

Stanford Photonics, Inc. Introduces New Zero Effective Dark Count/Read Noise Cooled Photocathode ICCD Camera for Scientific Imaging

Palo Alto, CA – January 20, 2004 -- Stanford Photonics announces the release of the XR/MEGA-10Z™ ICCD camera for photon limited imaging and detection. The patent pending product was first shown in November 2003 at the Society for Neuroscience Annual Meeting in New Orleans, where it generated interest as the first camera in the commercial marketplace to demonstrate "effective" dark count and read noise levels of zero. Peltier cooling of a high quantum efficiency cathode reduces thermally generated dark counts to less than one event per frame at 120 frames second; a dual microchannel plate gain stage provides light amplification of up to 1,000,000. As a result, single photon events can be digitized and visualized far above the read out noise level of the CCD, effectively eliminating it as a component in the imaging process. Additionally, ion feedback noise, which is common in high gain image intensified imaging, is reduced by the use of a dual rather than single stage micro channel plate (MCP). A fast framing mega pixel CCD fiber coupled to the intensifier allows dynamic events to be captured at video rates and faster. Added features of the XR/MEGA-10Z™ are Peltier cooling of the CCD (for extended exposures/time lapse applications) and the exclusive ABF™/Automatic Bright Field feature that instantaneously adjusts photocathode gate time and intensifier gain to compensate for up to seven decades of light level change. ABF™ allows for hands-off surveys of samples with a large variance in brightness, as well as bright field imaging without the need for a second camera.

Incorporated in 1989, Stanford Photonics, Inc. designs and manufactures electro-optic assemblies and systems with end applications in remote viewing, surveillance, x-ray, photometry and low light level imaging and analysis. Products include "single component" devices, such as custom designed fiber-optic light and image guides, as well as complete integrations: design-optimized light sources; sensor-based light measurement systems; custom CMOS/CCD cameras; and intensified CCD (ICCD) cameras ranging from low cost "point and shoot" units to extended resolution, high performance, computer controlled configurations.. Stanford Photonics also engages in outside contracts and private label production, providing conceptual and developmental support in optics, mechanical, electronics and system design. The company sells its own products directly, through referrals and through a growing network of resellers and distributors. For information: <http://www.stanfordphotonics.com> or contact: info@stanfordphotonics.com , phone: 650-969-5991

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