Press Release

Instrument Systems expands NVIS display measurement portfolio according to MIL-STD-3009

Munich, 30 July 2026 – **Instrument Systems presents its portfolio of measurement solutions for night-vision-compatible lighting and displays according to MIL-STD-3009. These solutions offer pass/fail compliance testing, evaluation and reporting applicable for NVG-compatible lighting and displays in military and civil aviation applications. The portfolio includes calibrated hardware with MIL certificate, software and positioning systems.**

Night Vision Imaging System (NVIS) applications require lighting that supports safe nighttime operations without compromising the performance of night-vision goggles. Incompatible light sources can reduce contrast, impair situational awareness and cause glare or image degradation. Instrument Systems' NVIS testing solutions are designed to measure the spectral ranges and viewing geometries relevant to established standards such as MIL-L-85762A, MIL-STD-3009 and SAE AS 5452B.

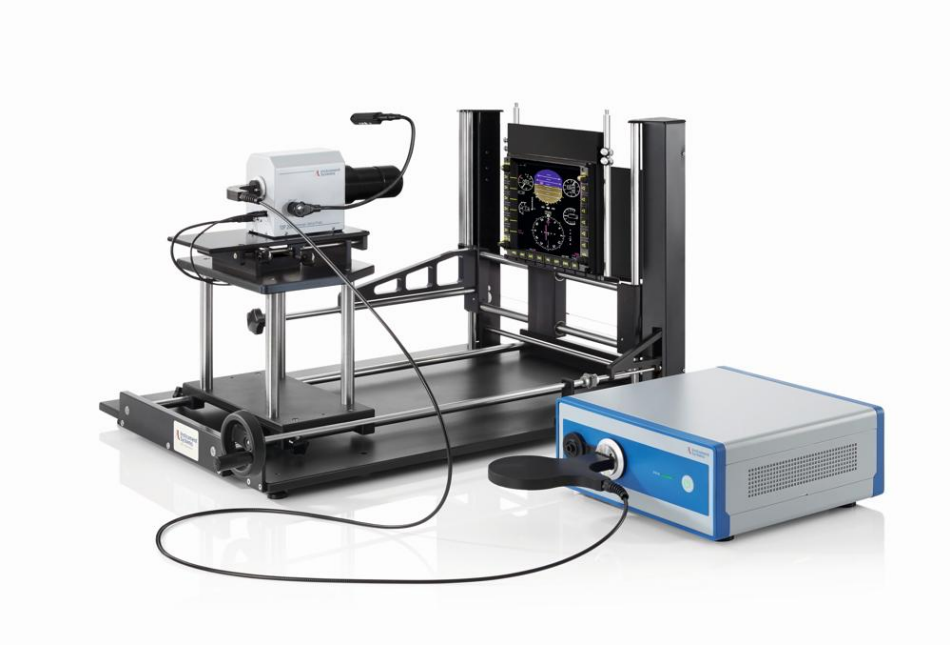
The DTS140D NVIS system consists of the TOP 200 telescopic optical probe and the CAS 140D spectroradiometer. The TOP 200 uses an optimized Pritchard-style optical design to produce a sharp circular measuring spot. It includes six selectable apertures, interchangeable lenses, a large field of view with viewer camera for sample alignment and a fiber-coupled design with a patented mode mixer. The mode mixer compensates for changes caused by fiber movement.

The CAS 140D spectroradiometer covers the 380- to 1040-nm range and is adapted to the MIL requirements with dedicated NVIS bandpass filters and automatic sensitivity adjustment. The system architecture is designed to handle the extreme optical dynamic range between the visible and near-infrared regions that make NVIS radiance measurements so challenging. The DTS 140D NVIS display test system is delivered fully calibrated, including the MIL test certificate in accordance with MIL-L-85762A and MIL-STD-3009.

SpecWin Pro laboratory software provides functions such as live viewer image display, automatic pass/fail testing, data export and report generation in NVIS measuring mode. The system can also be integrated with positioning systems, such as the DTS 500 series, to measure emission patterns, viewing angles and panel graphics. In addition, software developer kits (SDK / dll) are available to automate all components and evaluate according to the MIL standard.

The Instrument Systems NVIS portfolio supports a broad range of applications, including military and rescue aviation, civil avionics, marine operations, police missions, medevac aircraft and special air cargo. Devices under test range from small symbols on push buttons up to large display panels. In addition, NVIS-friendly testing probes can be easily added for exterior lighting products.

Certified calibration and traceability are core elements of the offering. Measurements are traceable to the Physikalisch-Technische Bundesanstalt (PTB) in Germany and the National Institute of Standards and Technology (NIST) in the United States through Instrument Systems' ISO 17025-accredited test laboratory. This supports comparability across locations, production lines and metrological setups.



DTS 140D NVIS – turnkey solution designed to measure night vision compatible displays and panel graphics according to MIL-STD-3009.

Night-vision-compatible cockpit lighting and displays support safe aircraft operation when using night-vision goggles.

About Instrument Systems GmbH

Instrument Systems GmbH, founded in Munich in 1986, develops and produces high-end light measurement technology that is indispensable for manufacturers of consumer electronics, (AR/VR) displays, Micro(O)LED wafers, VCSEL/laser systems, automotive lighting and LED/SSL modules. All solutions benefit from the CAS series of high-precision spectroradiometers that are widely recognized and used worldwide. In combination with 2D imaging colorimeters, integrating spheres and goniometer systems, they enable high-precision and accurate measurements in the entire spectral range from UV to IR, traceable to PTB or NIST. Today, Instrument Systems is one of the world's leading manufacturers of light measurement technology. At its Berlin facility, the "Optronik Line" of products is developed and marketed for the automotive industry and traffic technology. Instrument Systems has been a wholly-owned subsidiary of the Konica Minolta Group since 2012.
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