

Press release

Instrument Systems at ISAL 2017

Innovations for accurate and fast measurement of headlamps and displays

Munich, September 2017 – "Your Drive to Innovation!" is the message from Instrument Systems, showing its enlarged and optimized automotive portfolio from 25 – 27 September at the ISAL 2017, Darmstadt. Center of attention is the new DSP 200 photometer of the Optronik Line with a broad area of applications in automotive exterior and traffic lighting. Additionally, the new LumiCam 2400 imaging colorimeter will be presented, which has been especially optimized for automotive needs in display measurement.

Optronik Line DSP 200 Photometer

The DSP 200 photometer is the new core product of the Instrument Systems Optronik Line portfolio. Like its predecessor DSP 10 it is the perfect instrument for extremely fast "on-the-fly" scanning in combination with the goniophotometers of the AMS series.

Due to a completely new designed sensor with detector cooling, the DSP 200 offers outstanding sensitivity and stability for precise measurements even at very low illumination levels. The instrument meets, of course, all requirements of the newest standards, like EN 13032-1 and DIN 5032-7 (2017). A low-noise photo diode with $V(\lambda)$ -filtering and optimized electronics provides for a broad dynamic range from 0.1 mlx to 200 klx. At the same time the very high local resolution allows an accurate determination even of high gradients when measuring headlamps. Therefore, the DSP 200 is suitable for all automotive and traffic applications, as well as for flashlights and for measurements of all pulse width modulated light sources. It communicates via CAN-Bus and is compatible both with the predecessor DSP 10 and with all goniophotometers of the AMS and LGS series.

The user-friendly touch screen display shows the measured values together with the calibration menu and comes with a calibration management which is very easy to maintain.

AMS goniophotometers for headlamps and displays

The Optronik Line specialists from Berlin will show two AMS goniophotometers in action, each in combination with the new DSP 200 photometer. Due to its large size, its dynamic power unit, its robust construction and wide traversing range the goniometer AMS 5000 is ideally suited for the fast and efficient measurement of large, heavy headlamps and traffic lights. The AMS 200 goniometer has been designed for the characterization of small to medium-sized signal lamps, headlamps and light modules. With its small footprint and integrated rack this system offers a versatile and efficient alternative for laboratories with restricted space.

LumiCam 2400 imaging colorimeter for automotive displays

The functionality of the new LumiCam 2400 imaging colorimeter and the versatility of the corresponding LumiCam software will be shown in a dashboard measurement test setup. The camera has a resolution of 5 megapixel which matches perfectly the needs of versatile automotive measurement applications, i.e. luminance and color distributions of displays and electronic panel graphics or homogeneity of automotive interior displays.

In addition, Instrument Systems will present a setup for LED high power measurement with the new CAS 140D spectroradiometer. The 4th generation of the worldwide very successful CAS 140 series stands for highest accuracy, reliability, repeatability and stability in lab and production. For automotive needs the instruments of the CAS 140 series are key products in proven turnkey solutions by Instrument Systems, i.e. for display quality control.

www.instrumentsystems.com I www.optronik.de



Figure 1: DSP 200 Photometer, Instrument Systems / Optronik Line

Company profile of Instrument Systems GmbH

Instrument Systems was founded in 1986 and is based in Munich, Germany. The company develops, manufactures and markets turnkey solutions for light measurement. Instrument Systems delivers a comprehensive range of light measuring products for industrial and research applications. These include high-performance spectrometers, as well as imaging photometers and colorimeters. Key applications are LED/SSL and display measurement, as well as spectroradiometry and photometry. Today Instrument Systems is one of the world's leading manufacturers in this area. Products of the Optronik line for the automotive industry and traffic technology are developed and marketed at the Berlin facility (former Optronik GmbH). About 85% of sales are generated by the export business. Since 2012, Instrument Systems has been a wholly-owned subsidiary of the Konica Minolta Group.

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