

Press Release

New spectroradiometer speeds up LED production

The new CAS 125 spectroradiometer with CMOS sensor is designed to maximize production efficiency and offers a unique “Recipe” mode that enables time-optimized control.

Munich, January 2020 – *Product life cycles are getting shorter all the time. The corresponding increase in the number of product variants presents manufacturing companies with new challenges. Production lines need to be faster and more complex, yet also more user-friendly. Instrument Systems – a well-known manufacturer of light measurement technology – works closely with its customers in the field of LED production to develop modular and flexible components for quality inspection in mass production environments. For the new spectroradiometer CAS 125, Instrument Systems has therefore focused on production-related applications for LEDs in the spectral range between 200 and 1100 nm. Instrument Systems will be presenting its new measurement device for the first time at booth 716 of next year’s Strategies in Light trade show, which will be held in San Diego from 11 to 13 February, 2020.*

For the CAS 125 spectroradiometer, Instrument Systems decided to equip the device with a CMOS sensor that is linked to a specially developed electronic readout circuit. This combination enables very low measurement times of 0.01 milliseconds while simultaneously optimizing long-term stability. The spectrograph design is based on the high-end CAS 140D device, which is already well established in the market. This gives the CAS 125 a level of optical performance comparable to that of the CAS 140D in terms of both stray light suppression and optical throughput. The device-specific electronic readout circuit enables time-optimized control of the spectrometer through parameterization of successive measurements in Recipe mode on the CAS 125. This eliminates the time-consuming step of communicating with the PC to initialize each subsequent stage of the measurement process.

Another unique feature of the CAS 125 sensor is its built-in temperature stabilization feature. This results in dark current behavior that is independent of the ambient conditions, enabling the CAS 125 to ensure optimum long-term stability even in environments where temperatures fluctuate. A further highlight is the ability to parameterize the flash trigger. This element helps users synchronize the spectrometer with other system components, for example by triggering a photodiode measurement.

These key features – temperature stabilization and Recipe mode – are two of the CAS 125's unique selling points. They significantly improve automated processes in LED production, thus boosting productivity.

www.instrumentsystems.com

Exhibition notice:

Strategies in Light 2020, Booth 716
11–13 February 2020, San Diego, USA

Figure:

The CAS 125 spectroradiometer with CMOS sensor has been optimized for applications in production environments.



Further text material and photos:

<https://services.instrumentsystems.com/owncloud/index.php/s/HjsPFuPA0HgkNmX>

Company portrait of Instrument Systems GmbH

Instrument Systems GmbH, founded in Munich in 1986, develops, manufactures and markets all-in-one solutions for light measurement applications. Its core products are array spectrometers and imaging colorimeters. The company's main fields of activity are LED/SSL and display metrology, spectral radiometry and photometry, where today Instrument Systems is one of the world's leading manufacturers. The Optronik line of products for the automotive industry and traffic technology is developed and marketed at its Berlin facility. Instrument Systems has been a wholly-owned subsidiary of the Konica Minolta Group since 2012.

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