

Press Release

High-performance for wavelengths in infrared

New CAS 140D IR spectroradiometer with improved optical and electronic components offer the user higher productivity due to shorter measuring times in the infrared range.

Munich, April 2022 – At LASER WoP 2022 Instrument Systems will be presenting its latest spectroradiometer CAS 140D IR for measurements in the SWIR (shortwave infrared) wavelength range. The latter offers the proven high measurement accuracy and reliability of the CAS140D series - internationally recognized as a reference - for wavelengths of 780–1700 nm. Compared to its predecessor, the CAS 140D IR has a significantly better performance in signal sensitivity, stray light suppression and electronics. Visit us at booth A6.221.

For over 35 years Instrument Systems has been a hallmark of excellence in light measurement technology. This is especially true for the globally recognized high-end spectroradiometers. They are the key component for a wide range of photometric tasks in diverse, innovative applications. All radiometric, photometric and colorimetric properties are calculated from the spectral data of the spectroradiometer with the aid of extensive software suites such as SpecWin Pro. Their precision and accuracy are thus especially important for exact readings.

The new CAS 140D IR also guarantees this proven high measurement accuracy and reliability. It also promises significantly better performance for wavelengths in the infrared range than its predecessor CAS 140CT IR. Thanks to a new design of the optical architecture, throughput has been increased by up to 70%. The stray light proportion has again been significantly reduced. In addition, the CAS 140D IR contains a new electronic platform that enables faster processing of measurements: the minimum possible integration time has been reduced from 10 ms to 4 ms, the total scanning time for a measurement from 16 ms to 10 ms. The advantages for the user lie in higher productivity due to shorter measuring times, accompanied by greater precision and repeatability. As a supplement to the broadband model (780–1700 nm) high-resolution devices are available specially for the measurement of narrow-band laser diodes such as VCSEL: e.g. 1300–1440 nm with a spectral resolution of 0.75 nm.

Like all Instrument Systems spectrometers, the infrared models feature calibration traceable to PTB or NIST. With a trigger box, various different CAS models can be combined to a MultiCAS system and complex spectral measurements run parallel over an extremely wide wavelength range. In the right combination with 2D imaging colorimeters, IR cameras, integrating spheres or goniometer systems they precisely and reliably perform individual customer tasks for wavelength ranges from UV to IR.

Visit us in Munich at booth A6.221, LASER World of Photonics from 26-29 April 2022.



Figure: MultiCAS system for complex spectral measurements over a broad wavelength range.

Text material and images:

https://instrumentsystems.owncloud.online/index.php/s/26D7be6dFYrp4JW

Company profile Instrument Systems GmbH

Instrument Systems GmbH, founded in Munich in 1986, develops, manufactures and markets all-in-one solutions for light measurement technology. Our key products are array spectroradiometers, luminance cameras and imaging colorimeters. The main areas of application are LED/SSL and display colorimetry, spectral radiometry and photometry as well as laser/VCSEL characterization. Today Instrument Systems is one of the world's leading manufacturers in the industry. Products of the Optronik Line for the automotive industry and traffic technology are developed and marketed at its Berlin location. Since 2012 Instrument Systems has been a wholly-owned subsidiary of the Konica-Minolta Group.

Please send a specimen copy to:

Instrument Systems Optische Messtechnik GmbH, Kastenbauerstr. 2, 81677 München Dr. Karin Duhnke, Tel. +49 (0)89-45 49 43-426, E-mail: duhnke@instrumentsystems.com