

## Press Release

### Goniometric characterization of curved displays

At Display Week 2023, Instrument Systems will be presenting its latest goniometer DMS 904 for the optical characterization of curved displays

**Munich, Mai 2023** – *At this year's Display Week, due to take place at Los Angeles Convention Center from 21–26 May 2023, Instrument Systems will be launching its latest DMS series of goniometers. The DMS 904 was designed for the optical characterization of large and curved displays. Based on the proven DMS movement methodology, it has seven motorized axes for automatic measurement. The additional X-axis permits decentralized, angle-dependent measurements for displays up to a width of 1.8 m. The enlarged temperature control chamber enables movements during the measurement process in X- and Z-direction and has an interior space of 160 x 60 x 20 cm. In addition, at Booth 915B Instrument Systems will be showcasing its product range for the color and homogeneity testing of AR/VR headsets, to which the LumiTop series of high-resolution 2D imaging colorimeters belong. The two new models LumiTop X20 and X30 were specially designed for display tests under low- and high-luminance conditions.*

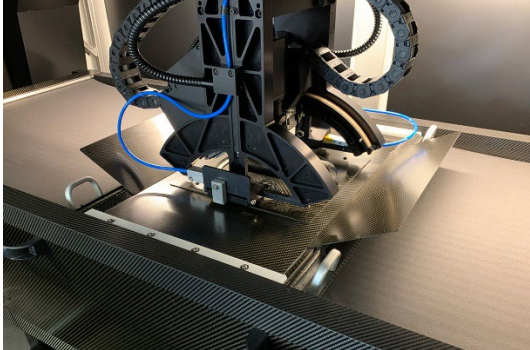
#### **DMS 904 – Goniometric characterization of curved displays**

The established DMS series of display measurement systems offers many options for the view direction-dependent optical evaluation of displays. They incorporate a motorized positioning unit and a temperature control chamber for testing at -40 to +105 °C. Their equipment enables, for example, measurement of the spectral reflectance under hemispherical direct or diffused illumination, or the determination of contrasts under diverse ambient lighting conditions. The new DMS 904 goniometer was specially developed for larger and curved displays. It has seven motorized axes for automatic measurement, a motorized microscope aperture wheel and an integral alignment camera. The additional X-axis permits decentralized, angle-dependent measurement of displays up to a width of 1.8 m. The enlarged temperature control chamber permits movements in X- and Z-direction and has an interior space of 160 x 60 x 20 cm.

#### **LumiTop X20 and X30 – Display measurements at high and low luminance**

A special highlight at Display Week will be a preview of the two new LumiTop models X20 and X30. Compared to the previous proven models in display production, they feature a higher camera resolution (20 MP or 30 MP), flexible field of view and particularly wide dynamic range for high and low luminance measurements. The new flicker electronics are designed for frequencies from 1 Hz to 1 kHz. Both models are optionally available with a

motorized focus. Suitable applications are homogeneity measurements and error detection under special luminance conditions.



**Illustration:** The new goniometer DMS 904 with additional motorized x-axis for curved displays and extra big chamber and heat-cool system for large devices.

**Text material and images:**

<https://instrumentsystems.owncloud.online/s/r65EOTwqnTywzF>

**Company portrait of Instrument Systems GmbH**

Instrument Systems GmbH, founded in Munich in 1986, develops and manufactures high-end light measurement technology that is indispensable for manufacturers of consumer electronics, (AR/VR) displays,  $\mu$ LED wafer, VCSEL/laser systems, automotive lighting and LED/SSL modules. All solutions benefit from our high-precision CAS series of spectroradiometers, widely recognized and in use worldwide. In combination with 2D imaging cameras, integrating spheres and goniometer systems, highly precise and accurate measurements from UV to IR can be performed with traceable results to PTB or NIST. Today Instrument Systems is one of the world's leading manufacturers of light measurement technology. The "Optronik Line" products for the automotive industry and traffic technology are developed and marketed at our Berlin facility. Our branch in Korea adds the "Kimsoptec Line" products to our portfolio and addresses mainly the Korean Light & Display market. Instrument Systems has been a subsidiary of the Konica Minolta Group since 2012.

**[www.instrumentsystems.com](http://www.instrumentsystems.com)**

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