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Press Release

Konica Minolta to launch CA-410, A Color Analyzer for Measuring Displays Including OLED Displays used in Smartphones, TVs, automobiles

To Improve Productivity and Enhance full Graphic Expression of Evolving Displays

Nieuwegein, November 2017

Konica Minolta, Inc. announced to launch the CA-410, a color analyzer designed for measurement and correction of advanced display technology such as OLED displays.

The CA-410 is an optical measuring device used for inspection and adjustment of white balance and gamma on production lines manufacturing TVs, smartphone displays, etc. Succeeding the CA-310, the CA-410 now offers high-speed, high-accuracy measurement of higher-dynamic-range (HDR) displays, such as achieved with OLED technology.





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Main Features

1. Accuracy-Guaranteed Luminance Measurement Range 25 Times wider than the Previous Model for higher-quality HDR Displays

Demand for higher-quality images and video has been growing among smartphone users, due partly to dramatic increases in communication speed. In response, manufacturers are accelerating the development of higher-resolution displays with improved contrast ratio and color reproduction, such as HDR displays. The manufacturers of these displays require a color analyzer with a wider measurement range, from extremely low to high luminance.



Earlier model display: 0.01 to 500 cd/m²

Display brightness measurement example



HDR display: 0.001 to more than 1,000 cd/m²

The CA-410 features upgraded sensor circuits that achieve an accuracy-guaranteed luminance measurement range from 0.001 to 5,000 cd/m², 25 times wider than the previous model. This increased measurement range will help manufacturers to control and improve the quality of high-resolution displays, enabling smartphones and TVs to show higher-quality images and videos.

2. Faster Measurement Speeds to Improve Productivity

The CA-410 can measure extremely low luminance levels of just 0.001 cd/m² in one second, fast enough for integration into manufacturing processes. Improved sensor capabilities and CPU calculation speed reduce measurement time by 30% cutting the time taken by the gamma correction process on the line and contributing to higher productivity.

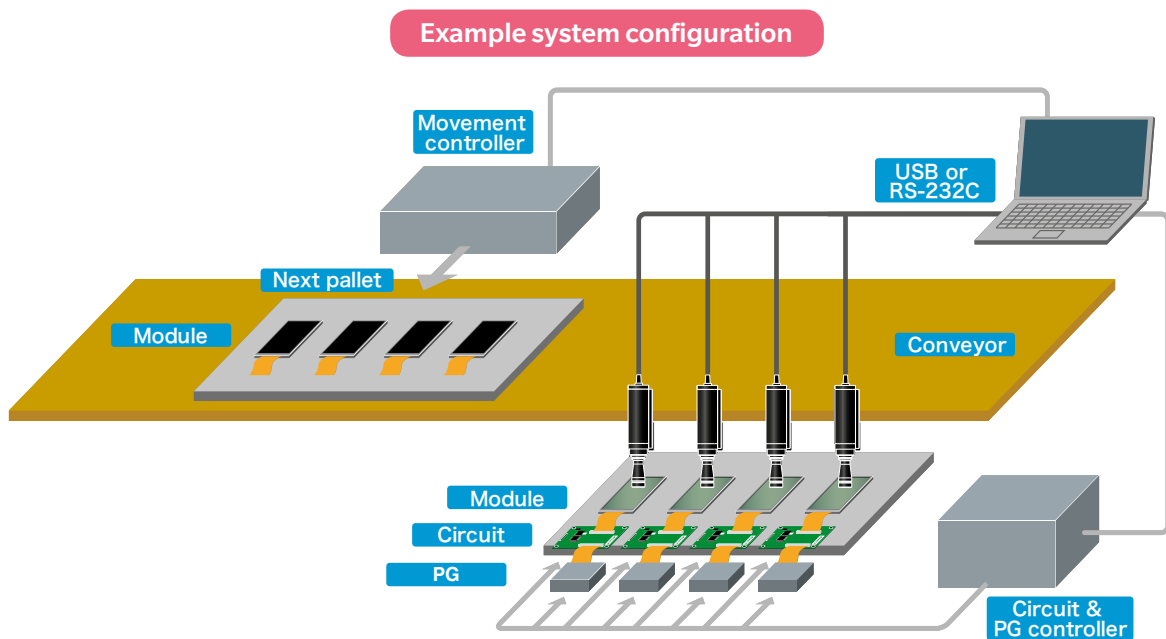




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3. Easy Integration into Automated Processes for the Digital Manufacturing Age

Designed to be integrated easily into automated manufacturing processes, the CA-410 can be operated without manual input. The system can also be configured using a direct connection of the measurement probe to the computer.



*1: White balance is the process of adjusting the light intensity ratio of light in the three primary colors - red, green and blue – for accurate reproduction of white.

*2: Gamma is a measure of tonal response. Gamma correction makes the brightness and color of the black and white halftone appear more natural and smooth to the eye.

*3: Based on gamma measurement simulation compared to CA-310 under Konica Minolta's test conditions (for 64 measurements). It excludes display startup time and wait time.



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As part of its SHINKA 2019, the Medium Term Business Plan announced by Konica Minolta in 2017, the company is committed to carrying out strategies concurrently in three business areas—core business, growth business and new business—in its Industrial Optical System Business, which combines the company’s Sensing Business with its other resources.

In the core business for sensing, Konica Minolta seeks to capture a greater share for light-measuring products by capitalizing on the growing demand for OLED displays and other market changes, and for color-measuring products by developing new product applications for the automobile, food and building-material industries.

In response to increasing automation at production sites and the growing importance of data utilization, the growth business strategy aims to combine the visual surface inspection technology held by Radiant, a company acquired by Konica Minolta in 2015, with existing optical measuring technology to provide turnkey in-line inspection systems, thereby achieving high-added-value, high-profit businesses.

For new business, Konica Minolta will leverage its sensing and image analysis technologies to build high-added-value products ready for the next generation in three categories: digital manufacturing, Quality of Life solutions and status monitoring solutions.

Konica Minolta will continue evolving so that it can better anticipate the needs of not only its customers in the manufacturing industry but also end users, and offer quality products for the benefit of society.

About Konica Minolta Sensing Europe B.V.

Konica Minolta Sensing Europe B.V., part of Konica Minolta Inc. Japan, is a leading provider of measurement solutions for applications in the fields of Colour & Appearance and Light Measurements. Konica Minolta Sensing Europe serves the industry in more than 30 countries in the EMEA region with Branches and qualified Distributors. Derived from our state-of-the-art optical and image processing technologies, measuring solutions from Konica Minolta Sensing help improve quality control and support R&D in a wide variety of industries. Our colour management solutions are essential to control and monitor quality in many areas of manufacturing, such as automotive, coatings, plastic, construction materials, food, chemicals and pharmaceuticals. In the area of Light & Display measurement technology, Konica Minolta Colour Analyzers enjoy an “industry standard” position.

For further information about the company, visit www.konicaminolta.eu/measuring-instruments

Contact details: **Konica Minolta Sensing Europe B.V.**

Andreas Ullrich

Phone: +41 (0) 43 322 98 05