



Press release

Innovative LUMIMAX® Coaxial Lights from the LES series with High Power LEDs of the latest generation



New LUMIMAX co-axial lights in light field diameters from 40 x 40 mm to 160 x 160 mm

Suhl, August 2022. Higher. Faster. Further. It is not only athletes who strive to constantly better themselves, but also image processors. Machine Vision systems must achieve higher and higher performances, be as fast and easy to integrate as possible, and be able to work reliably from greater distances, due to restricted installation conditions – and of course, they must cost as little as possible. The new LUMIMAX® Coaxial Lights from the LES series have everything it takes to overcome these challenges. Thanks to High Power LEDs, new performance classes can be achieved. When interacting with larger light fields, image fields can be homogeneously illuminated from greater working distances. There are no drops in brightness at the edges, thanks to the coaxial lighting concept. The integrated controller technology and the universal connection concept make integration and commissioning easier – this will save time and money.

Coaxial lighting has a highly diffuse light field. The light is not shown directly on the object field, but coaxially through a semi-transparent vertical mirror in the optical axis of the camera, and reflected in the camera. Irregularities deflect the light and appear dark in the test image. This concept enables surface inspections, completeness checks and print inspections, even for reflective or mirror surfaces. The positioning of the light directly in front of the camera also enables the standard-compliant reading and verification of two-dimensional codes.

The optical structure of coaxial lights inevitably reduces the quantity of light. Thanks to the use of High Power LEDs from the latest generation and the optimisation of the integrated power electronics, the new LES series can compensate for this effect – the lights are up to 6 times brighter than before. In particular, in flash mode, light outputs of up to 500,000 lux can be created thanks to the compact LED arrangement.

The size of the illuminated areas, and subsequently the test object as well, is limited by the lighting concept with coaxial light direction. Light field diameters of 40 x 40 mm, 60 x 60 mm, 80 x 80 mm and 100 x 100 mm are sufficient for many applications, especially code-reading tasks. The LES series was expanded for more extensive objects. With the LES160, object fields of up to 160 x 160 mm² can be illuminated in the light colours red, green, blue, white or infrared.

Like most LUMIMAX® High Power Lights, the series possess integrated controller technology for permanent and switch or flash mode. The standardised M16 connection concept enables simply and universal electrical control. Mechanical integration is also very easy, thanks to mounting holes on the front. A reproducible arrangement of the smaller LES40 and LES60 Lights for standard-compliant code reading is also possible with the LUMIMAX® verification adapters.

Find out more detailed information at this year's VISION about the possible uses of the LES series as well as other product highlights of the LUMIMAX® brand. iiM AG cordially invites you to visit its booth 10D51. Further information on the LUMIMAX® product range can also be found at: www.lumimax.com

About iiM AG

iiM AG measurement + engineering is the developer, manufacturer and distributor of high-quality, high-performance products for Machine Vision. In Suhl, we develop and manufacture high-performance and highly functional LED lights under the LUMIMAX® brand for Machine Vision applications in a very wide range of industrial areas, such as for the automobile, semiconductor, pharma, food, drinks and tobacco industries. A second division develops and markets special measuring technology and peripherals for the cable and wire industry to record geometric features, particularly on insulating covers and cable sheathing, in accordance with standards. A team of over 60 engineers, technicians and skilled workers assists our customers as a partner when realizing their challenging tasks. In order to guarantee a high standard of our processes as well as continuous improvement, we annually undergo an inspection of our Quality Management System according to ISO 9001:2015 and are certified by DEKRA Certification GmbH.