

Press release

Extreme light output for extreme Machine Vision applications – the new LUMIMAX® LQXP series



Extreme Performance lights LQXP60, LQXP80 and LQXP40 as transmitted light version (from left to right)

Suhl, January 2023. With the new lighting series LQXP, the LUMIMAX® brand extends its range of products in the "Extreme Performance" sector. These extremely powerful lights are similar to the LQHP range in that they are useful as Area Flood Lights as well as Area Lights. Its high performance in continuous and switch mode means LQXP lights are ideal for use in demanding Machine Vision applications.

Code-reading tasks as well as presence and position monitoring are the most common image processing applications within the logistics, automobile or pharmaceutical sectors. However, the environmental conditions are not always ideal to safely and reliably accomplish these tasks. Nevertheless, use of powerful lighting is generally a must in order to get usable test images. The brighter the light, the shorter the exposure time can be on the camera, resulting in a more stable test process relative to outside influences such as movement or ambient light. However, there is not always enough space available to mount a large light in the immediate vicinity of the test object. Above all, it requires

an extremely compact light that can also illuminate more expansive test areas brightly and evenly – a thermal challenge where every millimetre of the metal housing is required for heat dissipation on higher light outputs.

This is a challenge that iiM AG has taken on with development of the LUMIMAX® LQXP range. The powerful Area Flood Lights and Area Lights of the LQHP series are upgraded with an efficient cooling element to double the brightness in both continuous and switch modes. Even more demanding tests, such as extremely precise dimensional accuracy checks or evaluation of test criteria that are difficult to recognise can be resolved with exceptional light output. A wide range of accessories enables simple adjustment of light characteristics as well as fast, safe commissioning.

Technical features at a glance

- A compact housing with an innovative cooling element design for efficient heat management regardless of where the light is positioned
- Integrated controller technology combined with the latest LEDs and efficient lens arrays for implementing a new class of light output in both continuous and switch mode.
 - ▶ Up to **700,000 lx** at a working distance of 100 mm
 - ▶ Up to **25,000 lx** at a working distance of 1 m
- Lighting areas of 40 mm x 40 mm, 60 mm x 60 mm or 80 mm x 80 mm, suitable for a very wide range of installation conditions
- Wavelengths of blue (470 nm) to infra-red (850 nm) for high-contrast representation of various test criteria
- A wide range of accessories for easily adjusting the light characteristics
 - ▶ Fast modification of a directed Area Flood Light for highly diffused or collimated Area Lighting
 - ▶ Low storage costs due to its modular design
 - ▶ Additional polarising filters can be installed for suppression of disruptive reflections
- Robust Aluminium housing and IP64 protection make it ideal for use in demanding industrial environments
- Universal M16 connection for simple, fast electrical integration
- A range of practical mounting holes as well as a flexible 3D cable outlet for universal mechanical integration

Visit Product Configurator – Area Flood Lights
Visit Product Configurator – Area Lights

Further information about 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.