

# Pocket Projectors Possible Thanks to New LED

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Although it's smaller than a pack of cigarettes, Ostar — the latest high-performance light-emitting diode from Osram — is 50 times brighter than comparable predecessor models. Because of its small size (3 cm x 1 cm) and high brightness of 120 lumens (lm), the new LED is ideally suited for use in mini projectors. The LED itself takes up only a fraction of the device's surface area, generating an extremely bright and uniform light for its size. As a result, the Ostar could play a decisive role in the future development of projectors, ranging from applications for digital

cameras and PCs to pocket-sized mini projectors.

Unlike conventional projection systems, a miniature projector equipped with the Ostar module wouldn't require a warm-up phase or a fan, making the unit exceptionally quiet. And thanks to precisely positioned microchips and a compact layout for all components, the tiny RGB (red-green-blue) light source ensures a very even distribution of light onto the enlarged image. The high-performance LED meets all currently valid standards for projectors, producing a wide range of bright and highly saturated colors.

The ready-to-install mini-LED consists of four thin film chips (one red, one blue and two green), a ceramic carrier for connecting the system to the heat sink, and a number of elements for protecting against overvoltage.

Due to its special beam characteristics, Ostar is also suitable for use in other areas, such as medicine or the automotive sector. In cars, the bright LEDs would be especially useful in headlights and head-up displays that project speedometer data and other information onto windshields.

Source: Siemens

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