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Press Release May 12, 2023

Display of actual and ultra-high brightness, ultra-contrast ratio of 20 million or more

OCTEC Corporation Announces New "HALDiS™-C" Series

A nighttime road scene verification system with an in-vehicle camera at the Japan Society of Automotive Engineers - Exposition 2023.

OCTEC Inc. (Location: 2-8-22 Nakane, Meguro-ku, Tokyo; President: Kopff Pierre) is a Japanese company that develops, manufactures, and markets innovative solutions for high luminance (brightness) reproduction and display. We are pleased to announce that our new series of real and ultra-brightness display systems, HALDiSTM-C (especially suitable for nighttime road traffic scene verification with in-vehicle cameras), will be exhibited at the Automotive Engineering Exposition JSAE-2023 YOKOHAMA, to be held from May 24 (Wed) to 26 (Fri), 2023.

Vehicle-mounted cameras have evolved rapidly with the incorporation of a new generation of HDR sensors and are used to recognize and analyze the driving environment, which is fundamental and of paramount importance to ADAS systems. ADAS functions will continue to be increasingly demanded in the face of the globally faced and unavoidable social challenge of the increasing average age of drivers.

The development of ADAS systems for vehicles is currently based on driving tests on real roads and test courses because the performance of test benches in laboratories is not sufficient. However, testing critical scenes such as tunnel entrances and exits, backlighting at sunrise and sunset, and night scenes with glare and diffuse reflections in actual driving is very costly because such opportunities are rare. Therefore, conducting tests in the laboratory is desirable to ensure systematic reproducibility, to manage traffic scenarios, and above all, to manage the safety and working hours of the technicians conducting the tests.

HALDISTM-C, manufactured by Octec Inc, is a new series of products that responds to the demand for "enabling testing in the laboratory to the limits of in-vehicle camera performance. Prior to this official announcement, "HALDIS-C" has already been delivered to a major Japanese automobile manufacturer. Like the previous "HALDISTM" series, the C series is not formalized in a catalog, but is tailored to the individual requirements of each customer, and is offered on a half-tailor-made basis.



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● HALDiS[™]-C series: Specifications for the exhibited system

Screen size: 19 inches Maximum brightness: 65,000 cd/m2 Minimum luminance and contrast values:

which depend on the environment of the test bench and the darkness of the room. 0.002 cd/m2 which means a contrast ratio of more than 32,000,000

HALDiSTM-C series products are available from 17 to 65 inches and up to 98 inches. Nota: HALDiSTM-C" performance varies depending on system configuration.

● Contents for "HALDiS[™]-C" series: "oT-Sim[™]"

Octec Inc offers photometry validated CG contents "oT-Sim[™]" especially for nighttime driving road scenes as shot by in-vehicle cameras. The 3D simulation "oT-Sim[™]" (based on Unreal Engine), which incorporates our optical knowledge and photometry verification, makes it possible to avoid glare effects that are unavoidable with cameras (dark scenes and scenes with large differences in brightness and darkness, which are difficult to capture with a camera, when captured, contain glare effects that inhibit the reproduction of actual driving test conditions). Images acquired with our product "oT-Record[™]" can also be used as contents for the "HALDIS[™]-C" series as well as "HALDIS[™]-S".

● HALDiS[™]: Classified into three series according to application.

With the announcement of HALDiS™-C, HALDiS™ products will be classified into three series

① <u>HALDiS™-S</u>: Standard version mainly for virtualization of prototype design

(headlight design, drive simulator visuals, etc)

- ② <u>HALDiS[™]-C</u>: for automotive camera bench where contrast ratio is required
- ③ <u>HALDIS™-T</u>: for performance halls and multipurpose auditoriums, photometric dynamics of the image changes as the video or film progresses through the scene (details to be announced at a later date)

• Automotive Engineering Exposition JSAE-2023 YOKOHAMA Exhibition

- 1 Dates: Wednesday, May 24 Friday, May 26, 2023
- ② Venue: Pacifico Yokohama
- ③ Hours: 10:00-18:00 (until 17:00 on the last day)



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- ④ Participation: Free of charge (pre-registration required)
- (5) Booth No.: 297
- 6 Pre-registration URL: https://aee.expo-info.jsae.or.jp/ja/registinfo/

[Octec Corporation].

Octec Corporation is a Japanese company that develops, manufactures, and sells innovative solutions ("HALDiS™", "oT-Record™", "oT-Sim™", consulting, etc.) to accurately "measure", "reproduce", "display", and "verify" outdoor driving environment luminance and color. For the field of basic research in photometry and optics, we have technical agreements with the French National Laboratory (ENTPE, Lyon) and Breaut (Arizona, U.S.A.) In the fall of 2022, we installed a high-luminance display room in the center of Lyon (direct concession agreement with the French government) and have begun to expand our technology worldwide.

[Image description].

Image 1. Main image

Camera shooting of a "HALDiS™-C" night scene displaid image

Lens flare has been obtained exactly equal to what would be obtained in a real word shooting.

Image 2: Octec booth at the Automotive Engineering Exposition JSAE-2023 Yokohama Visitors can experience both "HALDiS™-S" and "HALDiS™-C

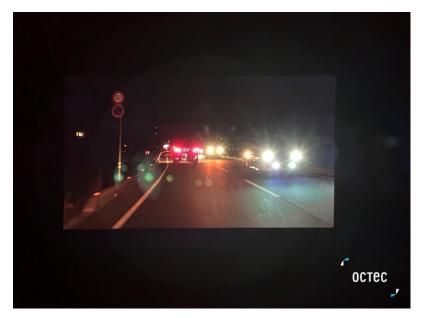




Image-1

Image-2