Not just a shadowless light
Not just a headlight
This is the next-generation medical light

Our aim was to redesign the lighting system that is essential in surgical operations to better meet the needs of on-site staff.

Our solution is an innovative product that eliminates shadows, renders colors with high accuracy, and far exceeds the specifications of medical headlights.

With 145,000 lux of light output, the OPELA III wearable surgical lighting system will change the way surgery is performed not just in general hospitals but everywhere from local clinics to specialized medical environments.
Clear visibility + Easy movement and Comfort

Wearable surgical lighting system OPELA III®

Features to realize clear visibility

High Illuminance

Our unique heat sink (patent granted, design registered) and the use of three LED lights achieved high illuminance level in spite of its compactness.

145,000 lux (at 350 mm)
96,000 lux (at 500 mm)

CRI/Ra (R1 to R15): More than 90, R9: 90
Color temperature: 4,500K

Reach deep and wall area

Shadow elimination

Our original cross-light distribution provides depth of field deep enough to illuminate wall areas of surgical field and minimizes shadows of surgeon’s hands and instruments.

Gentle to eyes

Optical design in accordance with the standard for surgical light is implemented. The outline of illuminated surgical field is blurred, which causes less fatigue to eyes.

Easy movement & Comfort

Easy movement

Powered by battery and wireless.

Comfort

Center of gravity is positioned as centrally as possible to reduce the feeling of weight.

Market positioning map of medical lighting systems

Headlight illuminance values calculated based on an illumination distance 500 mm.

Specifications

Product name: Wearable surgical lighting system OPELA III

Model: -H (High illuminance model)

Central illumination (with a 90 mm light field diameter)
145,000 lux (at 350 mm) ± 10%
96,000 lux (at 500 mm) ± 10%

Color temperature: 4,500 K ± 10%

Color rendering
CRI/Ra: 90 or above (R1 to R15), R9: 90

Illumination adjustment
Adjustable (5 -100%)

Illumination range
Variable (diameter of 90-150 mm)
(at an illumination distance of 500 mm)

LEDs used
3 Power LEDs

Continuous illumination time
Approx. 3-7 hours per battery unit
(with light level set at 50-100%)

Ambient temperature and humidity
When in use: 15-35 °C, 20-85%RH (non-condensing)
When charging: 15-45 °C, 20-85%RH (non-condensing)

Power consumption
Approx. 7.2 W

Input voltage
DC 12 V

Weight
Main unit: approx. 390 g ± 10%
Battery unit: approx. 465 g ± 10%

External dimensions
Main unit: approx. W160 x H170 x D300-350 mm ± 10%
Battery unit: approx. W160 x H100 x D50 mm ± 10%

Approx. user’s head circumference
53-66 cm

General name
Headlight (Class I)

Notification number in Japan
13B3X10231000001

FDA Registration number
3015136740

[ Manufactured and distributed by ]

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