

**BRIEF MANUAL INSTRUCTIONS
FOR MEDICAL LIGHT SOURCE**

SURGIXPERT OPTILUX LIGHT SOURCE 100W

WEBMEDITECH HEALTHCARE PRIVATE LIMITED

OPERATION NOTES

1. Front panel: please do not try to remove or adjust its position, otherwise the whole product will not work!!
2. Cooling fan: please keep more than 25cm distance between the product back part and the wall, so that air circulation is free and the product's inner heat can go outside properly (fans are on both sides for some models — please keep the same clearance). The product will shut down automatically if the inner temperature is too high, and will resume operation once the temperature comes back down.
3. LED module: please do not open the LED module without our permission; otherwise we will not be responsible for after-sales service!!

I. GENERAL DESCRIPTION

This LED light source is the latest product from us, representing the latest technology in LED development. It achieves the same effect as a traditional 350W xenon light source through an endoscope, making it a perfect alternative to xenon and halogen light sources. Users can adjust intensity directly from the control panel, which brings much convenience during operation. It is widely used in endoscopy, microscopy, quality insurance, system testing, industrial borescopes, inspection systems, image processing, machine vision, lab equipment, etc.

The benefits include:

- High brightness comparable to a 350W traditional xenon light source.
- Long life — up to 60,000 hours max, 120 times that of xenon, so you do not need to replace the bulb for years.
- Perfect color temperature of 5000K to 6500K, with color rendering over 70.
- Provides a consistent color temperature even after long use, giving a consistent visual effect.
- Does not emit light in the UV or IR range.
- Customized connector — accepts fiber light guides with active areas ranging from 3mm to 10mm in diameter.
- Saves more than 50% energy.
- Environmentally friendly.
- Friendly design, easy operation.
- Max power: 100W.

II. BASIC PARAMETERS

Technical parameters:

External power supply	100 – 240V AC, 50/60 Hz
LED power	100W
Color temperature	5000K – 6500K
Intensity	≈ 100,000 Lx
Luminous flux	≈ 2,250 Lm
Noise	Less than 55dB

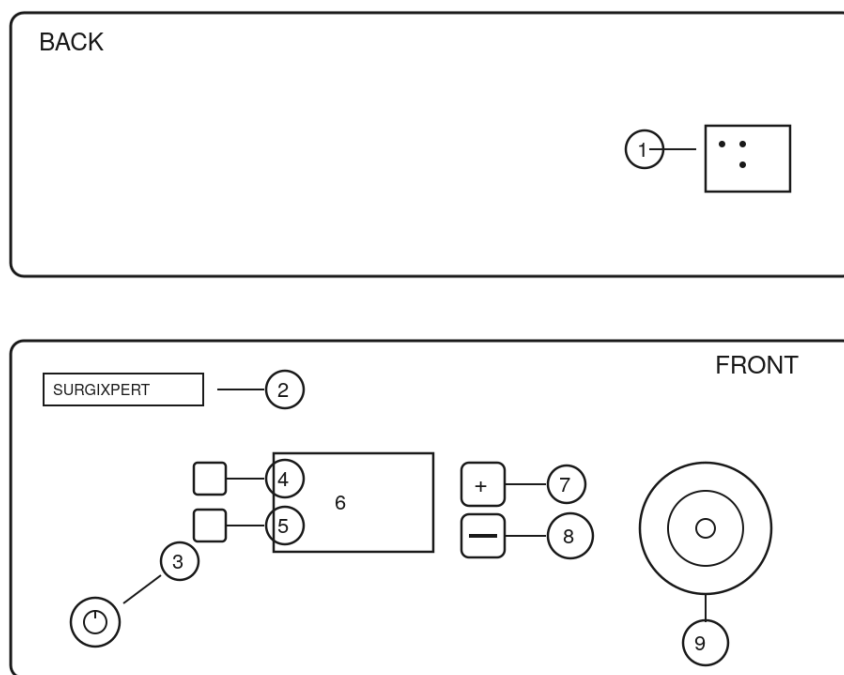
Shell temperature	Less than 55°C
Safety type	Class I; Type BF

Working environment:

Temperature	5°C – 32°C
Relative humidity	≤ 70%
Atmospheric pressure	86.0 – 106.0 kPa

III. OPERATION INSTRUCTIONS

General structure:



1. IEC power inlet with fuse holder
2. SurgiXpert nameplate / model name
3. Power button (illuminated)
4. Bulb ON indicator (green)
5. Bulb OFF / standby indicator (red)
6. LCD display
7. Increase intensity (+)
8. Decrease intensity (–)
9. Light output connector

IV. MANUAL INSTRUCTIONS

1. Preparation:

Make sure there is adequate clearance around the unit and the wall or trolley, so that the inner heat can escape properly.

2. Connect the power plug:

Connect the power cord to the IEC power inlet (item 1); rated 90 – 264V AC, 50/60 Hz.

3. Connect your fiber optic cable to the light output connector:

Item 9: we mainly provide two types of connectors — STORZ & WOLF. Please fully insert your cable, otherwise the output intensity will be noticeably different.

Note: there is a tiny screw on the connector; use it to loosen or tighten your cable.

4. Turn on the power:

Press the Power button (item 3). There is still no light at this point.

5. Turn the bulb on / off:

Press the Power button (item 3) again to toggle the bulb. The green indicator (item 4) lights when the bulb is ON; the red indicator (item 5) lights when the bulb is OFF / in standby.

6. Adjust intensity:

Press the “+” button (item 7) to increase the intensity, press the “–” button (item 8) to decrease the intensity.

7. Monitor intensity:

You will see intensity changes on the LCD display (item 6).

V. SAFETY FEATURES

- Automatic thermal shutdown: the unit powers down on its own if the internal temperature gets too high, and resumes operation once it has cooled down.
- Fuse-protected power inlet: the rear IEC inlet has an integrated fuse holder for overcurrent protection.
- Type BF applied part, Class I safety classification.
- No UV or IR emission, keeping the spectral output safe for prolonged use.
- Sealed LED module: must not be opened without authorization, to maintain certified safety and after-sales coverage.
- Fixed front panel: must not be removed or repositioned, or the unit will stop working.

