



## OEM LED Cold Light Source.

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### High Light Output for Medical Applications.

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BERLINER GLAS now offers a new high-performance OEM LED cold light source for medical<sup>1</sup> and industrial<sup>1</sup> applications. The optical system couples light into a light guide with very high efficiency, producing a luminous flux output that is comparable to a 180 W Xenon source. In addition our LED light source has a much longer lifetime.

The LED light source has a unique and state-of-the-art glass touchscreen. The front panel is made of tempered glass which is easy to clean and disinfect.

Because of its new USB board, functions such as brightness control, LED status and many more can be externally operated.

The LED cold light source is assembled to the highest quality in Germany. Optional we are offering customized versions or the LED light source module for integration.

BERLINER GLAS is ISO 9001, ISO 14001 and ISO 13485 certified.

<sup>1</sup> The light source is not approved as a CE device yet.

#### Applications:

- Medical endoscopy
- Microscopy
- Boroscopy
- Other technical applications

# Features of the New LED Cold Light Source.

## Optical Specifications

Lamp	high-power white LED
Luminous flux	500 lumen measured at the end of 1.8 m fused light guide with an active diameter of 4.8 mm and 0.54 NA; Warning: luminous flux is varying according to properties of used light guide!
Color temperature	approx. 6,500 K
Color rendering index	Ra 70 – 80
Life time	>50,000 h
Coupling optics	optimized for 4.8 mm light guide with 0.54 NA

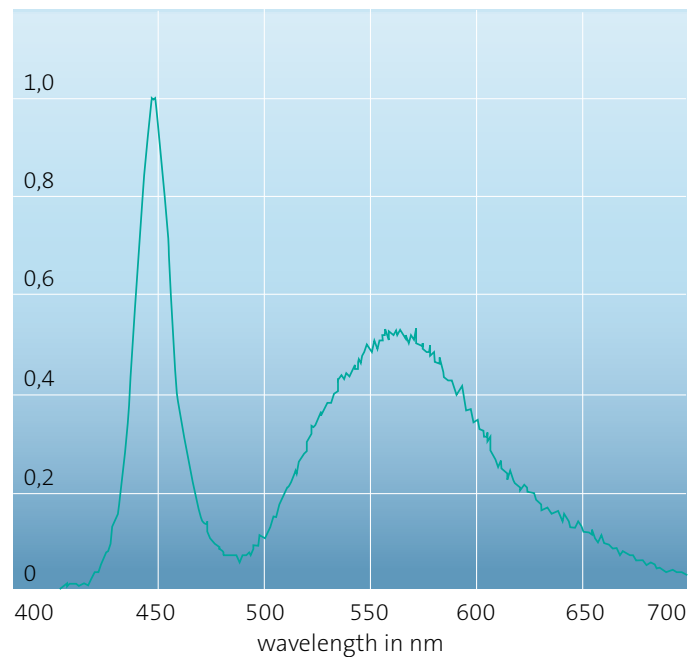
## Electrical Specifications

Power consumption	approx. 60 W
Power supply	150 W, integrated in housing
Reverse polarity protection	yes
Overheat protection	yes
Current monitoring	yes
Adjustment luminous flux	feed forward control, customized closed-loop control is possible
Electronical shutter	optical (turns off the LED in case of missing light guide)
Fan control	yes
Remote control	USB 2.0 interface

## Mechanical Specifications

Dimensions (l x w x h)	230 x 306 x 126 mm
Weight	approx. 4.8 kg
Adapter light guide	Storz™
Housing	steel, coated; glass front (thermally tempered)
Color	to be chosen by customer, standard: White
Cooling	active cooling, 12 V fan

## Spectrum of the LED



## Environmental Conditions

Operating temperature	0–40° C
Operational altitude	max. 2,000 mm
Storage temperature	-20–60° C
Relative humidity	30–90 %, not condensing

## Features on Request

- Customized coupling unit for other fiber diameters
- Additional coupling of other colors to adjust the color temperature
- Another lamp integrated as a substitute
- Microprocessor controlled displays with value for:
  1. LED temperature (with optional cut-off switch in case of overheating)
  2. Hour meter
  3. Log book (Protocol)
  4. Additional customer-specific value implementable