

SCHOTT® Headlamp

High Brightness LED – Headlamp for Medical Illumination



EyeMag® Light II Headlamp exclusively developed for Carl Zeiss Meditec AG.

Applications

Surgical Illumination
Dental Illumination
ENT Illumination

Approvals

Tested and approved according to standards for medical use:
EN 60601-1:2006
EN 62471
EN 60601-1-2
EN 61000-3-2 / -3

The SCHOTT® headlamp has been specifically developed for the most efficient coupling of LED with optics to generate high light output. Ready-to-use and equipped with two changeable battery packs and a charger station for nearly continuous operation it offers flicker-free bright light while still being small and compact.

The modern style housing - injection molded from medical grade ABS – has an integrated belt clip which can be removed by the user.

The light intensity setting can be switched in steps of 33%, 66% and 100%.

The remaining battery capacity is indicated by a multi-color LED whereby a right light indicates less than 25% remaining power and will start to blink if the remaining usage time falls below 10 minutes at full light output (100%)

Safe operation and protection of the high brightness LEDs from overheating is ensured by passive cooling as well as an electronic temperature feedback control. The battery communicates with a smart-bus system with the control electronics to ensure always the optimum charging conditions

The external wide range power supply for worldwide use at the separate charging station accepts power cables with regional outlet connectors..

For applications which require the use of an additional filter to cut-off particular wavelengths (i.e. for dental applications to cut off blue wavelengths), the SCHOTT® headlamp can be equipped with a removable filter.



Individual OEM designs can be developed.

Optical data	LED type	White high-performance LED
	Typical colour temperature CCT	5,700 Kelvin
	Colour Rendering Index CRI	Approximately 70
	Typical luminous flux	50,000 lux (WD 300mm)
	Typical illumination diameter	78mm (WD 300mm)
	Average LED life cycle	30,000 hours (luminous flux at 70% of the maximum)
Electrical data	Operating voltage / current	7,2V / 470mA
	Power consumption	Max. 3.5watts
	LED dimming	On three levels 100%, 66%, 33%
High temperature cut-out	Cooling	passive
	Temperature	Temperature control of the LED
External wide range power supply	Primary	100 - 240 volts, 50-60 Hz, max. 0.35A
	Secondary	8.4V
Dimensions	LED illumination device (D x W x H)	Ø 26mm x 38mm
	Weight	32g incl. cable
	Control unit (D x W x H)	33mm x 61mm x 106mm
	Weight (without removable battery)	46g
	Removable battery (D x W x H)	27mm x 57mm x 83mm
	Weight	120g
	Charger (D x W x H)	103 x 47 x 39 mm
	Weight	115 g
	Charging cradle (D x W x H)	66mm x 64mm x 81mm
	Weight	50g
Protection Class	IP protection class	IP 20
Operating conditions	Ambient temperature	+ 10 °C .. + 40 °C (automatic dimming in ambient temperatures >20 °C possible) + 10 °C .. + 35 °C for charger
	Relative humidity	85% max.
	Air Pressure	800 – 1060 hPa
Transport and storage conditions	Temperature	-20°C .. +40 °C
	Air Pressure	500 – 1200 hPa
	Relative humidity	10 ... 95 % (non-condensing)

Note:

LEDs are subject to manufacturing variations. Their intensity and chromaticity coordinate may therefore vary depending on their type, operating current, environmental conditions and period of application.

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Lighting and Imaging
SCHOTT North America, Inc.
 122 Charlton Street
 Southbridge, MA 01550
 USA
 Phone: +1-508-765-9744
 Fax: +1-508-765-1299
lightingimaging@us.schott.com
www.us.schott.com/lightingimaging

