

## Dräger Polaris® 5xx/7xx Simply good light!

These lights were designed for superior efficiency and compatibility, representing the state of the art in illumination technology.



D-31742-2010

### THE LED ADVANTAGE

High-power LEDs last up to 30 times longer than conventional halogen lights while consuming less energy. That means significant savings. Imagine up to 30,000 hours of quality illumination. The light column produced by the Polaris 5xx/7xx is long and homogenous, eliminating the need for constant repositioning or refocusing. Even the deepest surgical cavities are illuminated.

### POLARIS® 700

The Polaris 700 light head features 54 precision reflectors and a total of 108 LEDs, bundled together in 6 separate arrays that move in unison to focus the beam when the sterile central handle is rotated.

The active emitting surface provides homogeneous light distribution and shadow control.

- Output range: 70,000 – 160,000 lx
- Illumination depth: 1,100 mm

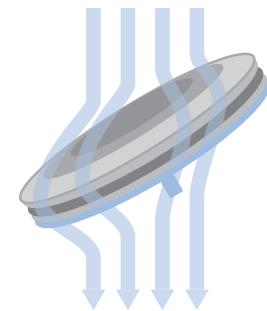
### POLARIS® 500

The Polaris 500 light head is a good choice to expand on the illumination performance of Polaris 700 even further. Featuring a total of 60 LEDs, the Polaris 500 can be used in several combinations or as a single minor surgical light.

- Output range: 46,000 – 110,000 lx
- Illumination depth: 1,100 mm

### STAY COOL – GET REAL

The color temperature of both light heads is 4,600 K neutral white, providing a realistic and detailed view of the operating field. The light beam projected by the LEDs is inherently cool; the thermal energy produced in the light head is dissipated by the integrated thermal management system TMS. The result is a cooler operating field. A compact, aerodynamic light head design helps to maintain the laminar flow surrounding the working area. LED replacement is simple and requires no special tools.



D-22578-2010

A compact, aerodynamic light head design helps to maintain the laminar flow





D-3076-2011

## Polaris 5xx/7xx Ready for the future

Because progress in LED technology is so rapid, even more efficient diodes will be available in the not-too-distant future. The modular design of the Polaris means that upgrading to these new LEDs will be easier and more economical.

The Endolight functionality, featuring a dimmed light intensity of 3,000 lux, brings the advantages of LED technology to the fields of endoscopy and minimally invasive surgery.

The Polaris 5xx/7xx is also ready for modern video networking. Together with our partners, we can offer you an integrated system to capture, display, store, manipulate and distribute video content from a central control interface.

### CASE CLOSED

The award-winning light head design features smooth, seamless surfaces and large, integrated, easy access

handles for enhanced ergonomics. The Polaris 5xx/7xx conforms to the DIN 1946-4:2008-12 Appendix E hygiene standard and can be used with laminar flow systems. The Polaris comes with a proven suspension system which includes a simple, straightforward operating concept.

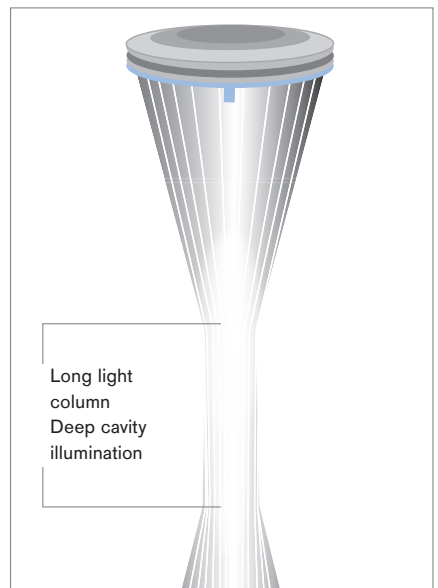
### SD CAMERA OPTION

The Polaris 750 and Polaris 550 variant were designed for use with our standard resolution video camera option. The camera replaces the central handle. You can still adjust the illumination field size as you would be using the central handle. You can share an SD camera between several operating rooms or between Polaris 750 and 550 variant. The SD camera's functions can be controlled by non-sterile personnel from a wall panel or a remote control. An external standard resolution MedView camera is also available.



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Usability: the Polaris Systems meets your need of ease of use and ergonomics.



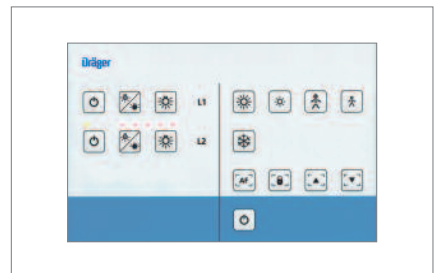
D-23877-2010



D-21819-2010



D-21849-2010



D-3074-2010

All functions of the Polaris® HD camera can be accessed by unsterile personnel using the intuitive and hygienic remote control, control unit or wall panel.



## Polaris HD camera

### Simply great definition!

#### THE HD ADVANTAGE

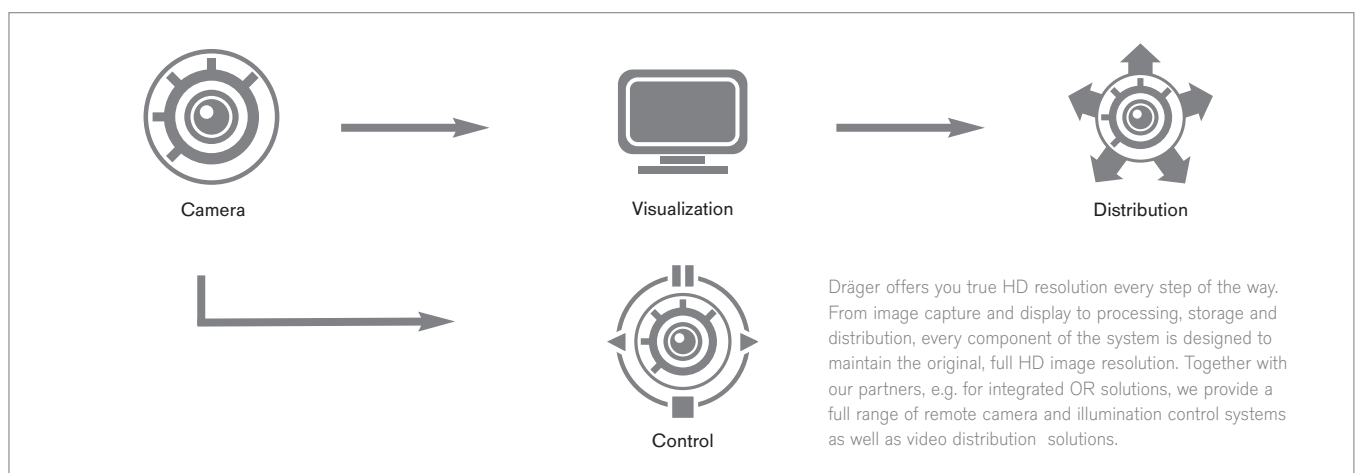
High definition has become the new standard for all kinds of imaging applications. It delivers professional quality, highly detailed, razor sharp images. That's why Dräger is also offering this high resolution video option for the Polaris line. The HD option is an excellent choice for creating training media, presenting live operations or for precise documentation of intricate procedures. The realistic image quality this system delivers gives the viewer the impression of actually being there.

#### HD CAMERA OPTION

With the Polaris 760 and Polaris 560 variant, you have the option to equip the light heads with a high definition camera which lets you capture procedures in detail whenever the need arises. Just replace the sterile central handle with the camera and you're ready to go. Illumination field size adjustment via the central handle remains unaffected. Installation is fast and easy. One HD camera can be shared between several operating rooms and/or between Polaris 760 and 560 variant. The hand-held

remote control lets the user adjust the camera's functions quickly and precisely while monitoring the image directly.

The Polaris 5xx/7xx of medical and surgical illumination systems and video options offers you a complete spectrum of choices. This very scalable, technologically advanced product portfolio gives you just what you need today without restricting your options for the future. Ask your local Dräger representative for more information or to arrange a demonstration at your hospital.



## TECHNICAL DATA

### DRÄGER POLARIS® 5XX/7XX

	Polaris 700 <sup>1</sup> /Polaris 750 <sup>2</sup> /Polaris 760 <sup>3</sup>	Polaris 500 <sup>1</sup> /Polaris 550 <sup>2</sup> /Polaris 560 <sup>3</sup>
Diameter of light heads	785 mm	630 mm
Max. illuminance in 1 m distance at 4,600 K	160,000 lux	110,000 lux
Light field diameter adjustable	220–290 mm	220–290 mm
Colour temperature	4,600 K	4,600 K
Light emitting surface	3866 cm <sup>2</sup>	2373 cm <sup>2</sup>
Colour rendering-index R <sub>a</sub>	93 %	93 %
Depth of illumination (L1 + L2)	1,100 mm	1,100 mm
Light sources [pcs]	108 high performance LED	60 high performance LED
Life time light sources <sup>4</sup> [h]	app. 30,000 h	app. 30,000 h
Max. power consumption of all light sources [W]	108 W	60 W
Power supply	24 V DC, 100 V - 240 V AC,	24 V DC, 100 V - 240 V AC,
Input into universal switch unit [V]	50 Hz/60 Hz	50 Hz/60 Hz
Camera	integrated SD or HD camera / external MedView camera	integrated SD or HD camera / external MedView camera

<sup>1</sup> Polaris 700 and Polaris 500 – light heads without preparation for integrated camera

<sup>2</sup> Polaris 750 and Polaris 550 – light heads prepared for SD-camera integration

<sup>3</sup> Polaris 760 and Polaris 560 – light heads prepared for HD-camera integration

<sup>4</sup> The light loses 20% of brightness after this time.

### DRÄGER POLARIS® CAMERA HD

	Full HD, 1920 x 1080 Pixel	Control unit	
Resolution	Full HD, 1920 x 1080 Pixel	Voltage	110 V - 240 V AC 50/60 Hz
Zoom	10 x visual, 12 x digital	Control unit output	
Auto shutter	1/2 to 1/10,000s	HD-SDI	1080i/50 / 1080i/60
Minimum illumination intensity	12.0 lux	DVI	1080i/50 / 1080i/60
White balance	automatic/manual	CVBS	PAL/NTSC
Motorized rotation range	> 360°	Y/C	PAL/NTSC
Focus	automatic/manual	YUV	1080i/50 / 1080i/60
Control option camera HD	Remote control		

#### CORPORATE HEADQUARTERS

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The quality management system at Dräger Medical GmbH is certified according to ISO 13485, ISO 9001 and Annex II.3 of Directive 93/42/EEC (Medical devices).