



MORE LIGHT

JENOPTIK GRYPHAX® POLARIS

# Explore your micro universe with the monochrome flagship.

## Camera properties

Sensor Size	✓	✓	✓	✓
Sensitivity	✓	✓	✓	✓
Frame Rate	✓	✓	✓	✓
Resolution	✓	✓	✓	✓



mono



uncooled



inactive

## Recommended: Applications

Life & Medical Science	✓	✓	✓	✓
Education Life & Medical Science	✓	✓	✓	✓
Material & Manufacturing	✓	✓	✓	✓
Education Material & Manufacturing	✓	✓	✓	✓
Fluorescence	✓	✓	✓	✓
Education Fluorescence	✓	✓	✓	✓

## Contrast techniques

BF	✓	✓	✓	✓
DF	✓	✓	✓	✓
DIC	✓	✓	✓	✓
Ph	✓	✓	✓	✓
Pol	✓	✓	✓	✓

# JENOPTIK GRYPHAX® POLARIS - technical data

Superior solution for fluorescence, life science & medical, material & manufacturing applications

## IMAGE SENSOR

Type	Square Utilised sensor diagonal	SONY back-illuminated CMOS 1/1.2" 12.2 mm
Pixel dimensions		7.2 x 7.2 $\mu\text{m}$
Color or monochrome		Monochrome
Transfer method   shutter mode		All pixel scan   rolling shutter

## CAMERA

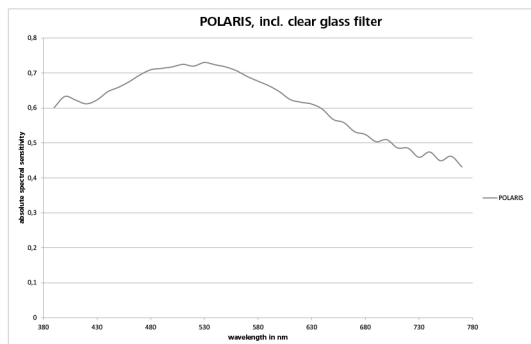
Camera resolution & speed in LIVE mode	900 x 900 pixel   22 fps   1200 x 1200 pixel   22 fps   1800 x 1800 pixel   22 fps
Camera resolution in RECORD mode	900 x 900 pixel   1200 x 1200 pixel   1800 x 1800 pixel
Camera resolution & speed in VIDEO mode	1200 x 1200 pixel up to 22 fps
Exposure time LIVE min. - max.	51 $\mu\text{s}$ - 1 s
Exposure time RECORD min. - max.	51 $\mu\text{s}$ - 60 s
Gain	Max. 60
Cooling	NO
A/D conversion   digital output	13 bit (8192 grey values)   16 bit
Absolute sensitivity threshold*	17.0 e-
Quantum Efficiency @ 532 nm (green)*	0.73 QE ( $\lambda$ )
Dark Noise [DN / e-]*	1.0 DN / 16 e-
Saturation capacity*	123.600 e-
Dynamic range*	77 dB
Filter	Clear-glass   optional IR cut
Power consumption	Appr. 3 W
Hardware Trigger	OUT
Weight	Appr. 400 g
Power switch	Yes
Optical interface	C-mount
Dimensions	85 mm x 75 mm x 50 mm
Storage options	-20°C up to 70°C
Operating temperature	+10°C up to + 35°C non condensing
Warranty	24 months
Conformity to CE / WEEE / RoHS / China RoHS	Yes

## RECOMENDED SYSTEM REQUIREMENTS

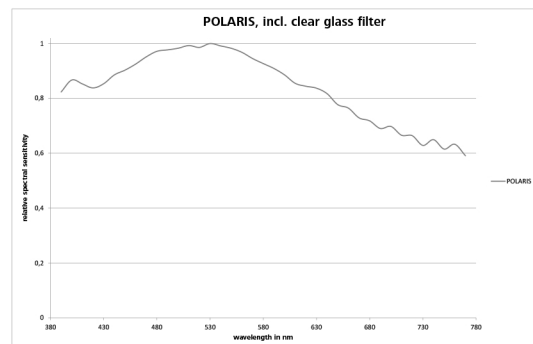
Personal computer	Intel i7 Quad-Core (min. 3.0 GHz) processor   8 GB RAM
Operating system -64 Bit	Win 7 SP1 / Win 8.1 / Win 10   MacOS High Sierra / Mojave   Linux Ubuntu 16.04 LTS
Data interface	USB 3.0 integrated, no extra power supply needed
Monitor resolution	1920 x 1200 or higher
Software (included in the package)	Microscope software - GRYPHAX APP / Twain APP / DirectX APP / Software development kit

## Measured spectral sensitivity\*:

### Absolute



### Relative



\*based on EMVA 1288 standard compliance guidelines

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