



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

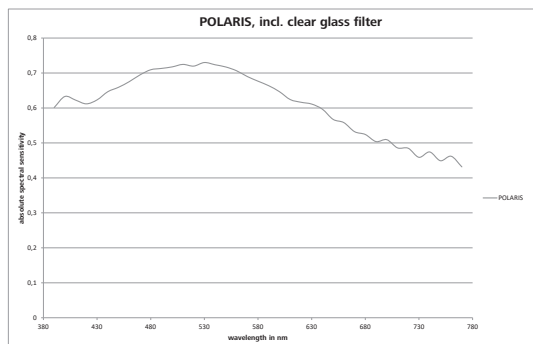
BF	● ● ● ●
DF	● ● ● ●
DIC	● ● ● ○
Ph	● ● ● ●
Pol	● ● ● ●

# JENOPTIK GRYPHAX® POLARIS - technical data

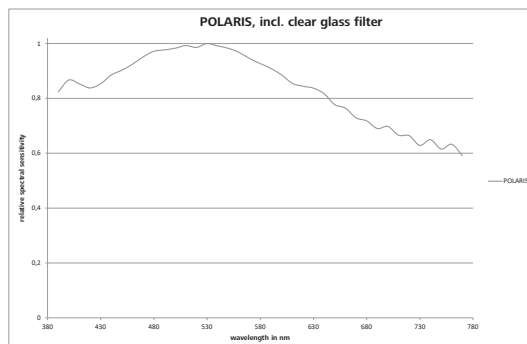
Superior solution for fluorescence, life science & medical, material & manufacturing applications

IMAGE SENSOR	
Type Square Utilised sensor diagonal	SONY back-illuminated CMOS 1/1.2" 12.2 mm
Pixel dimensions	7.2 x 7.2 µm**
Color or monochrome	Monochrome
Transfer method   shutter mode	All pixel scan   rolling shutter
CAMERA	
Camera resolution & speed in LIVE mode	900 x 900 pixel   23 fps   1200 x 1200 pixel   23 fps   1800 x 1800 pixel   23 fps
Camera resolution in RECORD mode	900 x 900 pixel   0.81 MPix   1200 x 1200 pixel   1.44 MPix   1800 x 1800 pixel   3.24 MPix
Camera resolution & speed in VIDEO mode	1200 x 1200 pixel up to 23 fps
Camera resolution & speed in SLOW MOTION mode	1200 x 1200 pixel up to 23 fps
Exposure time LIVE min. - max.	51 µs - 1 s
Exposure time RECORD min. - max.	51 µs - 30 s
Gain	Max. 30
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 (λ)
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 or comparable   8 GB RAM (dual-channel)
Operating system -64 Bit	Win 10 (build 1903 or newer)   macOS Catalina / Big Sur   Linux Ubuntu 18.04 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 / Micro-Manager / MetaMorph / Software development kit

## Measured spectral sensitivity\*: Absolute



## Relative



\*based on EMVA 1288 standard compliance guidelines

\*\*7.2 x 7.2 µm @ 1200 x 1200 pixel

JENOPTIK Optical Systems GmbH  
 Goeschwitzer Strasse 25 | 07745 Jena | Germany  
 Phone +49 3641 65-2143 | Fax +49 3641 65-2144  
 gryphax@jenoptik.com | www.jenoptik.com

