

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

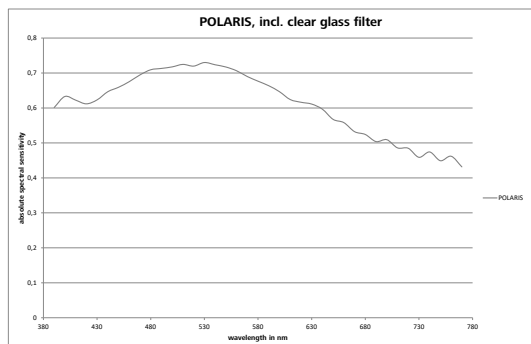
CAMERA

Camera resolution & speed in LIVE mode	900 x 900 pixel 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 μs - 1 s
Exposure time RECORD min. - max.	51 μs - 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 (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

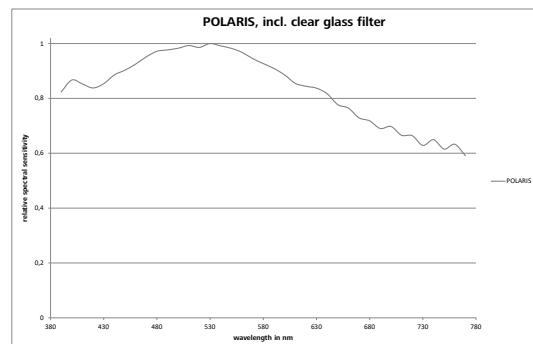
RECOMENDED SYSTEM REQUIREMENTS

Personal computer	Intel i7 Quad-Core (min. 3.0 GHz) processor 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

