



MORE LIGHT

JENOPTIK GRYPHAX® NAOS

# Explore your micro universe with revolutionary 5 & 20 MPix.

## Camera properties

Sensor Size	● ● ● ●
Sensitivity	● ● ○ ○
Frame Rate	● ● ● ○
Resolution	● ● ● ●



color



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® NAOS - technical data

Superior solution for life & medical science | material & manufacturing applications

## IMAGE SENSOR

Type Square Utilised sensor diagonal	SONY back-illuminated CMOS 1" 15.6 mm
Pixel dimensions	2.4 x 2.4 $\mu\text{m}$
Color or monochrome	Color
Transfer method   shutter mode	All pixel scan   rolling shutter

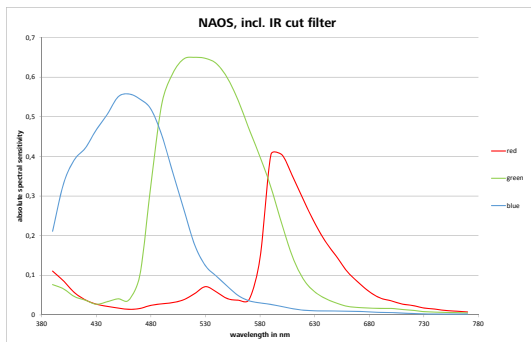
## CAMERA

Camera resolution & speed in LIVE mode	1800 x 1200 pixel   50 fps   2700 x 1800 pixel   30 fps
Camera resolution in RECORD mode	1800 x 1200 pixel   2700 x 1800 pixel   5400 x 3600 pixel
Camera resolution & speed in VIDEO mode	1800 x 1200 pixel up to 25 fps
Exposure time LIVE min. - max.	51 $\mu\text{s}$ - 1 s
Exposure time RECORD min. - max.	51 $\mu\text{s}$ - 30 s
Gain	Max. 30
Cooling	NO
A/D conversion   digital output	12 bit (4096 grey values)   16 bit
Absolute sensitivity threshold*	3.8 e-
Quantum Efficiency @ 532 nm (green)*	0.66 QE ( $\lambda$ )
Dark Noise [DN / e-]*	0.9 DN / 3 e-
Saturation capacity*	15.000 e-
Dynamic range*	72 dB
Filter	IR cut   optional clear-glass
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

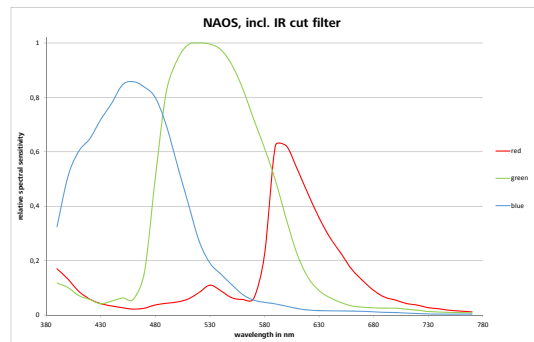
## RECOMMENDED SYSTEM REQUIREMENTS

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	3840 x 2160 pixel 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

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

