



MORE LIGHT

JENOPTIK GRYPHAX® RIGEL

# Explore your micro universe – monochrome in low light.

## Camera properties

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



mono



cooled



active

## 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® RIGEL - technical data

## Superior solution for monochrome fluorescence applications

### IMAGE SENSOR

Type Square Utilised sensor diagonal	SONY back-illuminated CMOS 1/1.2" 13.3 mm
Pixel dimensions	5.86 x 5.86 µm
Color or monochrome	Monochrome
Transfer method   shutter mode	All pixel scan   global shutter

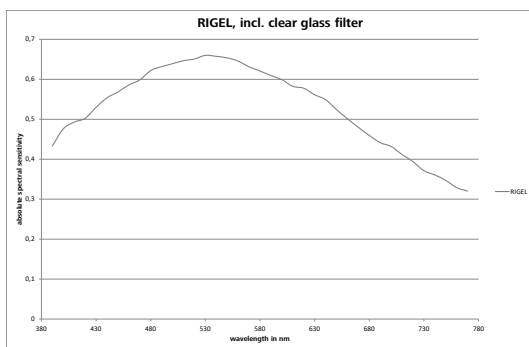
### CAMERA

Camera resolution & speed in LIVE mode	960 x 600 pixel   60 fps   1920 x 1200 pixel   60 fps
Camera resolution in RECORD mode	960 x 600 pixel   1920 x 1200 pixel
Camera resolution & speed in VIDEO mode	FULL HD - 1920 x 1200 pixel up to 25 fps
Exposure time LIVE min. - max.	26 µs - 2 s
Exposure time RECORD min. - max.	26 µs - 120 s
Gain	Max. 60
Cooling	YES***
A/D conversion   digital output	12 bit (4096 grey values)   16 bit
Absolute sensitivity threshold*	7.0 e-
Quantum Efficiency @ 532 nm (green)*	0.66 QE (λ)
Dark Noise [DN / e-]*	0.8 DN / 6 e-
Saturation capacity*	32.300 e-
Dynamic range*	73 dB
Filter	Clear-glass   optional IR cut
Power consumption	Appr. 4.5 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

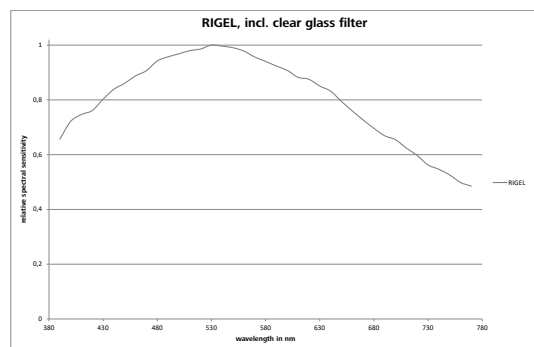
### RECOMMENDED SYSTEM REQUIREMENTS

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	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

\*\*\*unique vibration-free software cooling developed by JENOPTIK (further information gryphax@jenoptik.com)