



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

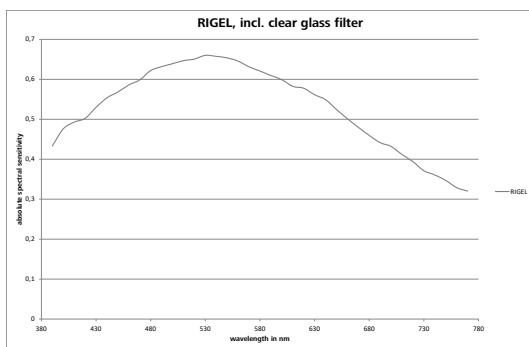
### CAMERA

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

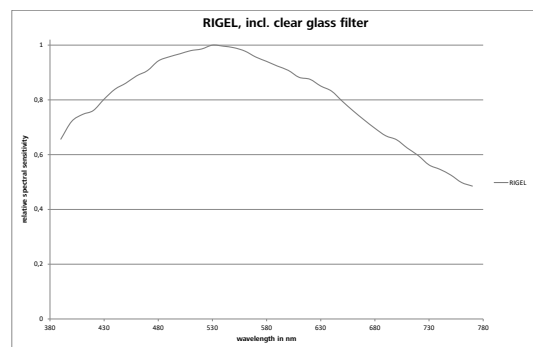
### RECOMMENDED SYSTEM REQUIREMENTS

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



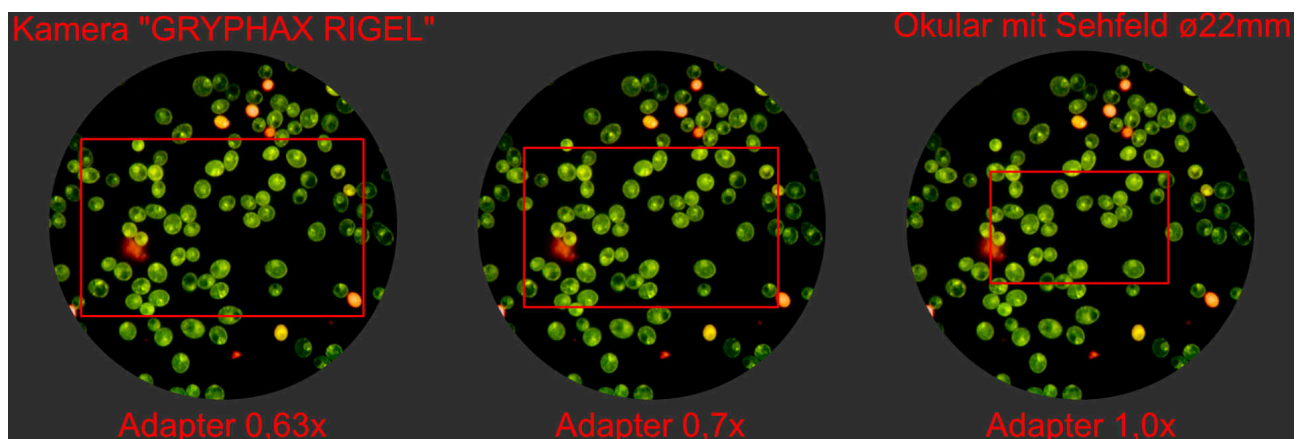
\*based on EMVA 1288 standard compliance guidelines

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

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



Zum Anschluß an Ihr Mikroskop benötigen Sie einen „Kamera-Adapter mit C-Mount“. Diese Adapter haben eine Optik eingebaut um die Sensorgröße der Kamera an das Mikroskop anzupassen.



Auf diesem Bild sehen Sie die Bildausschnitte, die Sie mit der Kamera JENOPTIK „GRYPHAX RIGEL“, an ein Mikroskop mit Okularen „10x(22)“, erhalten würden.

Wir empfehlen für einen Kamera-Adapter mit Optik **0,63x** oder **0,7x** zu verwenden.

Weitere Informationen zur Kamera und der Software finden Sie unter [www.mikroskoptechnik.de](http://www.mikroskoptechnik.de)

Haben Sie weitere Fragen oder benötigen ein Angebot - rufen Sie uns unter Telefon [03641-828080](tel:03641-828080) an oder schreiben uns eine eMail [verkauf@mikroskoptechnik.de](mailto:verkauf@mikroskoptechnik.de)