

## UV EXTENDED GLOBAL SHUTTER SCIENTIFIC CMOS CAMERA



UV - VISIBLE  
Optimized for 200 - 400 nm



170 FPS (8 bits)  
121 FPS (12 bits)



1.40 e<sup>-</sup> RMS




2856 x 2848 CMOS  
2.74 μm pixel pitch



80 dB and true 16 bits  
High Dynamic Range



SDK compatible with μManager,  
LabVIEW, MatLab, 

### ULTRA VIOLET EXTENDED & GLOBAL SHUTTER



### APPLICATIONS

#### LIFE SCIENCES:

- Bacterial identification
- Detection of contamination
- Fluorochemistry
- Phototherapy
- Mineralogy
- Entomology

#### ASTRONOMY:

- Ultra-violet astronomy
- Hot plasma studies
- Nucleic acid visualization

#### RESEARCH:


- Electrophoresis
- Optical lab measurements

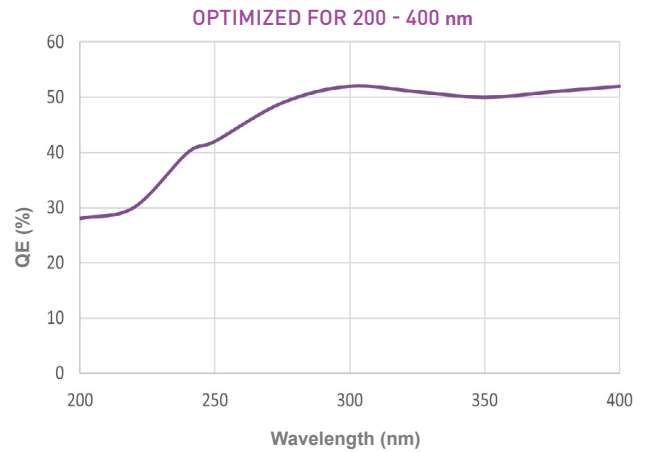
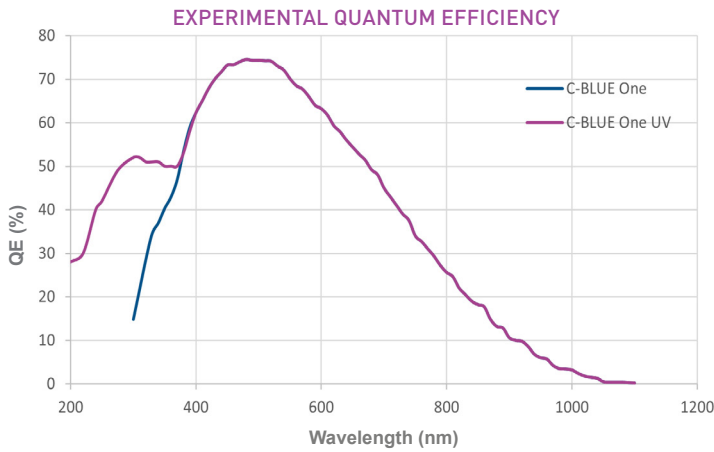
#### INDUSTRY:

- Leak detection
- Non-destructive inspection
- Forensic applications
- Hydrogen combustion analysis
- Cosmetics

# C-BLUE ONE UV PROVISIONAL PERFORMANCES

TEST MEASUREMENT		Result	Unit
Sensor size		2856 x 2848	pixels
		8.1	Mp
Pixel pitch		2.74	µm
Shutter Architecture		global	n/a
Maximum speed Full Frame in GLOBAL SHUTTER	in 8 bits	170	FPS
	in 12 bits	121	FPS
Maximum speed in binning (1424 x 1428)	in 8 bits	516	FPS
	in 12 bits	392	FPS
Minimum integration time	in 8 bits	4.35	µs
	in 12 bits	7.80	µs
Readout Noise (No binning, 24 dB, @ 50µs)		1.31	e <sup>-</sup> <sub>MED</sub>
		1.40	e <sup>-</sup> <sub>RMS</sub>
Analog gain		0 to 24	dB
Quantization		8, 12	bit
Quantization with HDR (High Dynamic Range)		16	bit

ADDITIONAL FEATURES
Back illuminated stacked sensor
Outputs: • CoaXPress 2.0 - CXP12x2 connection • 10 Gigabit Ethernet/Fiber with SFP+ module
<b>GigE Vision</b> 
GenICam compatible
Optical interface: C-Mount / CS-Mount
<b>Sensor thermal stabilization down to 10°C (air)</b>
<b>Liquid cooling optional with cooling plate for optimized performances</b>
Software: <b>Graphical User Interface:</b> First Light Vision - <b>Software Development Kit:</b> (C, C++, C#, Python, MatLab) / LabVIEW / µManager / Halcon



**FRAME RATE TABLE FOR CXP OUTPUT**

		Quantization	
		8 bits	12 bits
Lines	16	1841	815
	712	539	202
	1424	313	114
	2848	170	121

Values for CXP Output only  
(The number of columns does not affect acquisition speed)



Provisional Size and Weight :  
H64.1 x W76.2 x L154.3 mm, 1.1 kg, 15W max



POLYTEC GmbH  
Tel: +49 (72 43) 604-1540

Polytec-Platz 1 - 7  
Fax: +49 (72 43) 69944

D -76337 Waldbronn  
E-Mail: ot@polytec.de

GERMANY  
www.polytec.de

