



ximea



**xiC**

USB 3.1 Gen1 cameras  
with SONY Pregius sensors

# xiC USB 3.1 cameras with SONY Pregius sensors

Small, light, versatile. With incredible image quality.

## Facts

- Sony Pregius global shutter sensors, 2.3 - 12.3 Mpix
- 5.0 Mpix at 76 fps
- 4K sensors at 43 fps
- Color and monochrome sensors
- USB 3.1 Gen1 fast and convenient interface
- 26 x 26 mm front face size with C/CS-mount

## Features

- Low power consumption
- USB3 Vision compliant
- Various standard connector options: Micro-B, Type-C
- Ribbon cable variants for embedded systems
- Flexible GPIO, optoisolated and bidirectional
- High-quality images from Sony Pregius sensors
- Rugged and lightweight, aluminum alloy CNC machined housing



## Small and lightweight

Designed to be as small as possible in size and mass, this device also has the world's lowest power consumption for these sensors. The xiC cameras will crush your performance goals.

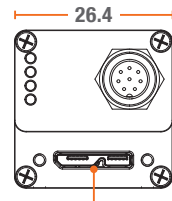
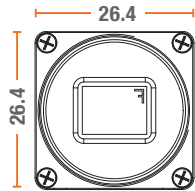
## Versatile by design

Thanks to its slim two-board stack size, the xiC camera line can be tightly integrated into embedded and multi-camera systems. Its small size and variety of interface configurations make it ideal for a high number of challenging applications. xiC cameras can be supplied in many configurations including various sensors in both color or monochrome, different data connection types (micro-B, type-C, or flex ribbon cable). This makes them compatible with the xiFLY system.

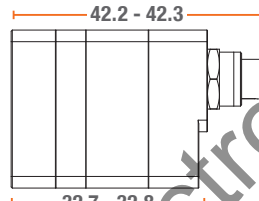
## Familiar and free of hassle

The standard USB interface offers a streamlined connectivity with the largest set of host computers. No auxiliary power is needed, as the cameras are fed directly through the USB bus. In case of the ribbon cable connection, all signals (power, data, IO) are integrated into the single link, reducing the number of extra cables.

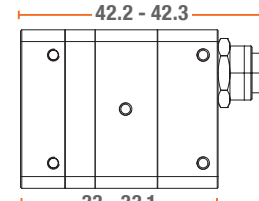
### Housed cameras



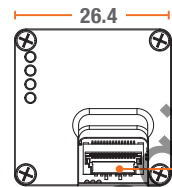
USB Micro-B connector (-UB)



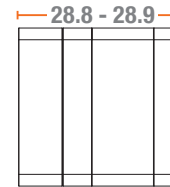
USB Type-C connector (-TC)



### Semi-housed cameras



'FL' ribbon cable connector  
GPIO in ribbon cable (-FL)



'FV' ribbon cable connector  
GPIO in ribbon cable

### Supported operating systems



Windows



Linux

macOS

### Language support



### Standards

GEN*i*CAM  
TRANSPORT LAYER

USB<sup>®</sup>  
VISION

### Supported vision libraries



MATLAB



HALCON  
a product of MVTec



and many more ...

## Sensors and models

Model <sup>1</sup>		Sensor	Resolution	Pix. size [µm]	ADC [bits]	DR [dB]	FWC [ke-]	Sensor size / diagonal [mm]	Optical size	Fps <sup>2</sup>	Power typical [W]
MC023MG-SY-UB	b/w	Sony IMX174	1936 x 1216 2.3 Mpix	5.86	10, 12	72	30.5	11.3 x 7.1 13.3	1/1.2"	165	2.2
MC023CG-SY-UB	color	Sony IMX174	1936 x 1216 2.3 Mpix	5.86	10, 12	72	30.5	11.3 x 7.1 13.3	1/1.2"	165	2.2
MC031MG-SY-UB	b/w	Sony IMX252	2064 x 1544 3.1 Mpix	3.45	8, 10, 12	71	9.9	7.1 x 5.3 8.8	1/1.8"	122	2.75
MC031CG-SY-UB	color	Sony IMX252	2064 x 1544 3.1 Mpix	3.45	8, 10, 12	71	9.9	7.1 x 5.3 8.8	1/1.8"	122	2.75
MC050MG-SY-UB	b/w	Sony IMX250	2464 x 2056 5 Mpix	3.45	8, 10, 12	71	9.8	8.5 x 7.1 11.0	2/3"	76	2.75
MC050CG-SY-UB	color	Sony IMX250	2464 x 2056 5 Mpix	3.45	8, 10, 12	71	9.8	8.5 x 7.1 11.0	2/3"	76	2.75
MC089MG-SY-UB	b/w	Sony IMX255	4112 x 2176 8.9 Mpix	3.45	8, 10, 12	70	9.8	14.2 x 7.5 16	1"	43	3.3
MC089CG-SY-UB	color	Sony IMX255	4112 x 2176 8.9 Mpix	3.45	8, 10, 12	70	9.8	14.2 x 7.5 16	1"	43	3.3
MC124MG-SY-UB	b/w	Sony IMX253	4112 x 3008 12.3 Mpix	3.45	8, 10, 12	70	9.9	14.2 x 10.4 17.5	1.1"	31	3.3
MC124CG-SY-UB	b/w	Sony IMX253	4112 x 3008 12.3 Mpix	3.45	8, 10, 12	70	9.9	14.2 x 10.4 17.5	1.1"	31	3.3

### Notes

<sup>1</sup> In the model name please replace -UB with -TC for USB 3.1 Gen1 Type-C, -FL for flat-flex cable connecting from the bottom of the camera, -FV for flat-flex cable connecting perpendicular to the sensor.

<sup>2</sup> Full resolution, RAW8 format