xiMU

subminiature USB cameras

·ximea

xiMU subminiature USB cameras

The world's smallest industrial grade USB cameras

Facts

- 15 x 15 mm front face footprint
- 3.4 g weight with the standard enclosure
- 18 Mpix 1/2.3" BSI RGB CMOS sensor
- 5 Mpix 1/2.5" RGB and B/W CMOS sensors
- 21 fps at 18 Mpix over USB 3.1
- 5 fps at 5 Mpix over USB 2.0

Features

- Small - fast - sensitive
- Low power consumption
- Ultra-small single PCB, board-level versions
- 4x bidirectional general purpose I/O
- Calibrated and linearized ex-factory
- Rugged and lightweight, aluminum alloy CNC machined housing

Designed for tiny spaces

Engineered for the smallest possible volume and weight, made with advanced high-density manufacturing and assembly process. xiMU are the smallest cameras in our portfolio as well as in the world of industrial cameras.

Fast & versatile

USB2 interface with a space-saving USB-C connector for fast image data transfer with up to 21 frames per second in full 18 Mpix resolution. Due to the global reset sensors, applications that involve motion are not excluded. 4 general purposes I/O ports allow easy use of triggered illuminators or peripherals.
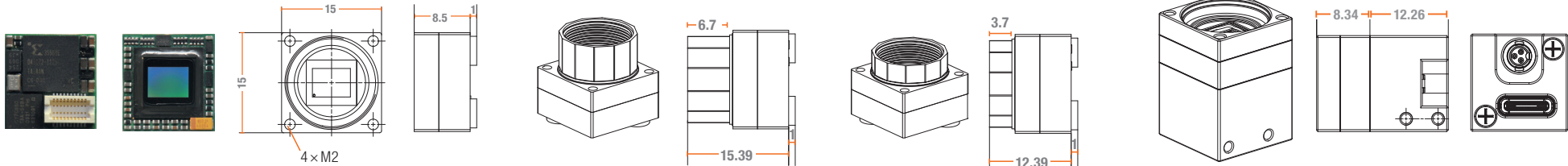
Always perfect images

The back-illuminated 18 Mpix (1/2.3") sensor provides brilliant, noise-free images. Factory calibrated and linearized xiMU cameras deliver consistent images under various operating conditions.

Board-level cameras for deep integration

The 5 Mpix sensors are also available as board level for tightest integration, all while still delivering their exceptional performance.

Subminiature cameras

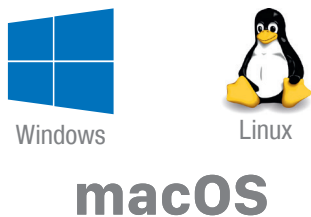MU9Px-MH board-level version shown in actual size

MU9Px-MH housed version

MU9Px-MH with long S-mount adapter

MU9Px-MH with short S-mount adapter

MU181CR-ON with USB Type-C adapter

Supported operating systems

Windows

Linux

macOS

Language support

python™

Standards

GEN<i>CAM
TRANSPORT LAYER

Supported vision libraries

MATLAB

POWERED BY
NATIONAL INSTRUMENTS
LabVIEW™

HALCON
a product of MVTec

OpenCV

and many more …

Sensors and models

Model		Sensor	Resolution	Pix. size [µm]	ADC [bits]	DR [dB]	Sensor size / diagonal [mm]	Optical size	Fps	Power typ. [W]
MU181CR-ON	color	OnSemi AR1820HS	4896 x 3860 18 Mpix	1.25	12	66	6.1 x 4.6 7.6	1/2.3"	21	1.7
MU9PC-MH [1]	color	Aptina MT9P031	2592 x 1944 5 Mpix	2.2	12	59	5.7 x 4.3 7.1	1/2.5"	5 [2]	0.76
MU9PM-MH [1]	b/w	Aptina MT9P031	2592 x 1944 5 Mpix	2.2	12	59	5.7 x 4.3 7.1	1/2.5"	5 [2]	0.76

Notes

[1] Please replace "-MH" with "-MBRD" in the model name to address the board-level camera

[2] The figure indicates the maximum achievable frame rate for full frame readout. The real performance will be affected by USB controller, number and type of USB devices attached to this controller, system processor and memory speed and configuration.

Further information

Please visit us at **www.ximea.com** for complete and up-to-date specifications. Get in touch with our teams at **sales@ximea.com.** We will be glad to assist!

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