

## USB 3.0 industrial camera mvBlueFOX3-4

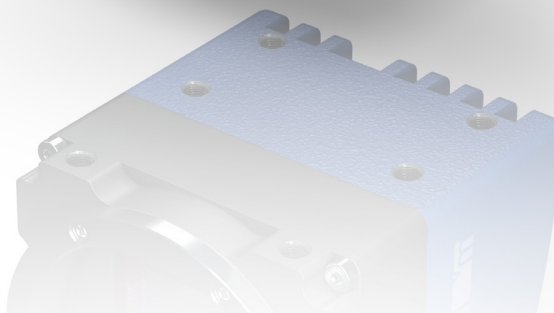
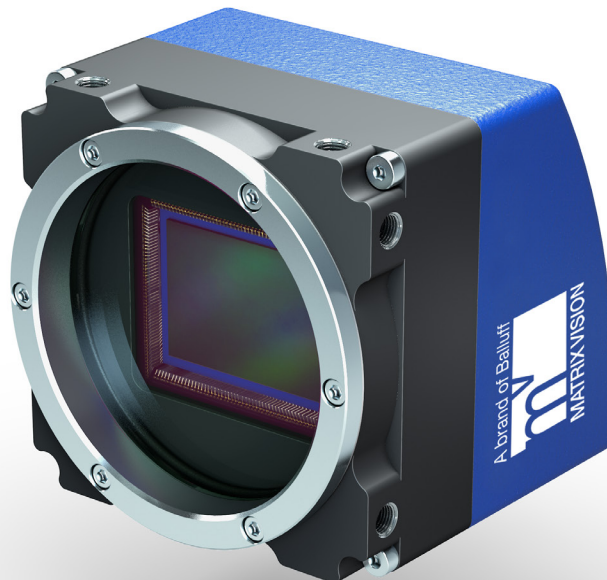
# USB3 VISION INDUSTRIAL CAMERA WITH 31 MPIXEL HI-RES SONY CMOS SENSORS

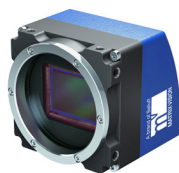
### Hi-res industrial camera for every detail

The USB3 Vision compliant cameras have generous FPGAs with many smart features, which are carried out directly in the camera and thus relieve the host system. With the 2/4 digital inputs and outputs, the cameras can be triggered, or subsequent processes can be controlled. The cameras are primarily designed for use in the sectors of mechanical engineering, traffic engineering, surveying and inspection.

### Features

- Compact form factor
- Reliable image transfer thanks to 256 MB image buffer
- FPGA based smart features reduce system load and simplify the overall system
- More details using large sensors with sizes greater than 1"
- Higher resolution and frame rate
- Same API as desktop Linux or Windows





## USB 3.0 INDUSTRIAL CAMERA mvBlueFOX3-4

|  |                     |
|--|---------------------|
|  | BF3-4-0315Z         |
| Variant <sup>1</sup>                     | G / C               |
| Resolution <sup>2</sup>                  | 6480 x 4856         |
| MPixel                                   | 31.5                |
| Max. frame rate <sup>3</sup>             | 12 / 14.4 / 48.3 Hz |
| Binning <sup>4</sup>                     | 16 / 16 / 16 / 16   |
| Shutter                                  | Global              |
| Sensor size                              | APS-C               |
| Pixel size                               | 3.45 µm             |
| Exposure time                            | 10 µs...20 s        |
| ADC resolution                           | 12                  |
| SNRmax <sup>5</sup>                      | 39.7                |
| DR <sup>5</sup>                          | 69.8                |
| Pipelined global shutter in trigger mode | ✓                   |
| Manufacturer                             | Sony                |
| Sensor                                   | IMX342              |

- 1 G = Gray, C = Color, E = Gray & Infrared Enhanced
- 2 Data of gray scale version
- 3 Streaming / Burst mode / Streaming with 2 × 2 Binning or Decimation (Horizontal x Vertical)
- 4 Max. Binning Horizontal / Max. Binning Vertical / Max. Decimation Horizontal / Max. Decimation Vertical.  
Note: Not all combinations of binning and decimation values are possible.
- 5 EMVA1288 measurement data of gray scale version

## ACCESSORIES

| Lenses                  | MV-O10020-M42-CZ    | MV-O5020-M42-CZ     | MV-O3520-M42-CZ     | MV-O1528-M42-CZ       |
|-------------------------|---------------------|---------------------|---------------------|-----------------------|
| Mount                   | M42                 | M42                 | M42                 | M42                   |
| Format                  | 24 × 36             | 24 × 36             | 24 × 36             | 24 × 36               |
| Pixel class             | 50                  | 50                  | 50                  | 50                    |
| Focal length            | 100                 | 50                  | 35                  | 15                    |
| F-stop                  | F2.0                | F2.0                | F2.0                | F2.8                  |
| Minimum object distance | 440                 | 240                 | 300                 | 250                   |
| Distortion              | 0.1 %               | -0.5%               | -1.8%               | -1.8 %                |
| Angle of View           | H:21°, V:14°, D:25° | H:38°, V:26°, D:45° | H:53°, V:37°, D:62° | H:100°, V:76°, D:110° |

| Connector   | KS-BCX-HR12<br>05.0   | KS-MICUSB3B-A LS<br>05.0 R2   | KS-MICUSB3B-A LS<br>AC12 05.0                                      | KS-USB3A-A EXT OPT<br>10.0 REV2  |
|-------------|---|---|--|--|
| Cables      | 5 m   | 5 m   | 5 m  | 10 m   |
| Interface   | Connector   | USB 3.0   | USB 3.0  | USB 3.0  |
| Description | Connection cable prepared for mvBlueCOUGAR-X/XD, or mvBlueFOX3, Hirose 12 pin to prepared wires | USB3 connecting cable mini USB-B to USB-A, Ø 5.8 mm, with lock screws on both sides, for mvBlueFOX3 | USB3 connecting cable mini USB-B angled to USB-A, with lock screws | USB 3.0 active optical cable, A plug to A plug, shield not connected to connector housing, additional adapter needed (12796) |