

Press release

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High-resolution 31-megapixel cameras for USB 3 and Dual-GigE

With the IMX342 Pregius sensor, Sony has launched a high-resolution global shutter CMOS sensor, which, with a pixel size of 3.45 µm is very light sensitive and provides a very high dynamic range. Due to the high resolution and size of the APS-C sensor, MATRIX VISION has opted for an M42 mount, which can be adapted to other lens mounts via adapters. To be able to operate both Dual GigE and USB3 equally, the housings of the existing camera families have been aligned, so that in the future the user can focus fully on the choice of this sensor or future high-resolution sensors and respond completely flexibly when choosing Dual GigE or USB 3. The housings therefore have a uniform front panel cross-section of 49.8 x 49.8 mm and are almost identical in depth: 53.8 mm for USB3 or 55.3 mm for Dual GigE. In order to meet the high demands on the lens, MATRIX VISION has added selected M42 lenses from Zeiss to the portfolio.

As the mechanical modifications for the Dual GigE family mvBlueCOUGAR-XD are minimal, MATRIX VISION has decided to integrate the sensor into the camera family via an option. In contrast, MATRIX VISION has introduced the new mvBlueFOX3-4 family in the USB3 section for high-resolution sensors. Both camera families offer an internal image memory of 256 MB, which enables a maximum frame rate of 14.4 images/s with a resolution of 6480 x 4856 pixels in burst mode. On a sustained basis, the families can reach 12 images/s (USB3) or 7.5 images/s in streaming mode.

In addition, both camera families have generous FPGAs with many smart features such as sequential shots, SmartFrameRecall, multi AOI, etc. as well as further image preprocessing, which are carried out directly in the camera and thus relieve the host system. With the 2/4 (USB3) or 4/4 (Dual GigE) digital inputs and outputs, the cameras can be triggered, or subsequent processes can be controlled. The four outputs of the Dual GigE version are even Direct-Drive outputs with which high-performance flashes, relays or triggers can be operated, so that, for example, no additional devices are necessary. The cameras are primarily designed for use in the sectors of mechanical engineering, traffic engineering, surveying and inspection.

The sensor can be ordered as of now as a Dual GigE version with the product name mvBlueCOUGAR-XD1031 or in the USB3 version as mvBlueFOX3-4-0315Z.