mvBlueCOUGAR-X

Next generation GigE camera

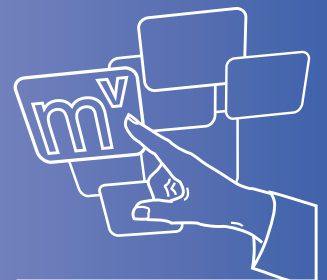www.matrix-vision.de

Mini size
maX performance

**Universal Gigabit Ethernet interface camera platform
with GigE Vision® and GenICam™ standards**

GiGE
VISION ®

GEN‹i›CAM

Engineered
& Assembled
in Germany

RECOGNIZE   ANALYZE   DECIDE

We Change Your Vision

MATRIX ®
VISION

Latest standards for more flexibility.

Thanks to the current GigE Vision® and GenICam™ standards and its compact size, the next generation Gigabit Ethernet camera family mvBlueCOUGAR-X can be integrated into various applications. With data rates of up to 1,000 Mbit/s and cable lengths up to 100 meters, the mvBlueCOUGAR-X is designed for Machine Vision tasks with high resolution and low latencies and also for tasks with precise and optimized images like in life science and medicine. The core of the camera consists of groundbreaking smart features to reduce the load of the host system – for more reliable and universal applications.

Easy integration – with GigE Vision®.

Ultra compact by using state-of-the-art components – ultra compatible with current GigE Vision® and GenICam™ standards for platform and manufacturer-independent usage.

More performance, more security, more flexibility: The smart features of the mvBlueCOUGAR-X.

Reduces load of the host system
- Flat field correction
- Bayer demosaicing
- Color correction
- Real-time image acquisition control

Reliable applications
- Large image memory up to 256 MB (as FiFo buffer or for camera record mode)
- Resend mechanisms (lossless image transfers)
- Bandwidth control (indispensable in multi-camera applications)
- Temperature sensors (enhanced temperature range) and timestamps (camera synchronization)
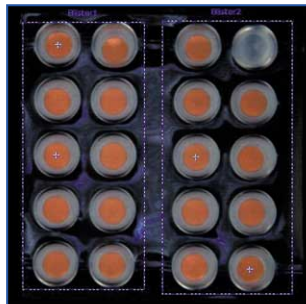
Universal applications
- Micro-PLC (e.g. for pulse width modulation)
- Different exposure series
- Different lens holders and filters
- Models with IP65 or for higher environmental temperatures

www.matrix-vision.com/cougar-features.html

mvBlueCOUGAR in action.

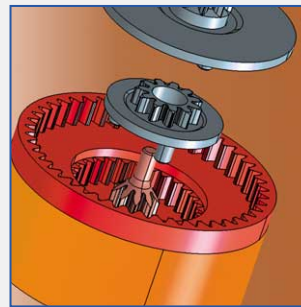## Many areas are using the flexible possibilities of the mvBlueCOUGAR-X.

❮ *Pharmacy: mvBlueCOUGAR-X checking packaging within the pharmaceutical field.*

❮ *Traffic: mvBlueCOUGAR-X used in traffic control systems. The mvBlueCOUGAR-X sensors are characterized by their high dynamic range. This ensures the best results even in varying lighting conditions.*

❮ *Safety: mvBlueCOUGAR-X provides more safety at construction sites. Reliable person tracking in 3D – regardless of the environmental lighting. The driver will be alerted within 300 ms after the event.*

❮ *Automation: mvBlueCOUGAR-X in multi-camera operation in the field of book-binding. The open design of the mvBlueCOUGAR-X with smart and robust digital I/Os makes it possible to integrate customer-specific extensions like an ultra-bright flash illumination.*

❮ *Measurement technology: mvBlueCOUGAR-X as a compact optical system in coordinate measurement machines. The integrated temperature sensors in combination with the compact size, high quality images, and high sensitivity make the camera ideal for integration.*

❮ *Automotive: mvBlueCOUGAR-X reading Data Matrix codes on plastic components.*

www.matrix-vision.com/cougar-stories.html

Pregius

STARVIS

Modular, open and future-proof.

There is a wide range of high quality CCD and CMOS sensors available for different applications – resolutions up to 31 Mpixels – even in the basic version of the mvBlueCOUGAR-X. The open design makes it possible to adapt and enhance the camera easily. Board-level versions can be configured and extended individually to meet demands and tasks.

With these features, the mvBlueCOUGAR-X is among the most flexible and upgradable systems on the image processing market with all advantages of the GigE Vision® and GenICam™ standards.

❮ *2 links 4 more speed!*
The new Dual GigE camera family mvBlue-COUGAR-XD joins together ultra fast and high resolution CMOS and CCD sensors with the well-known features of the mvBlueCOUGAR-X camera in the smallest housing in its class.
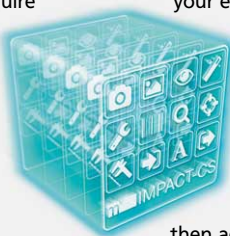
Let there be light! ❯
Camera with integrated flash – easier than ever: reliable control of high power LEDs directly via the camera. Optimal images guaranteed.

Accessories making it easy.

■ **Gigabit Ethernet and I/O cables**
  ◗ bent
  ◗ with lock screws
  ◗ suitable for drag chain

■ **Power supply with or without I/O cable**

■ **Lens holders**
  ◗ C-mount
  ◗ CS-mount
  ◗ S-mount

■ **Lenses**

■ **Filters**

■ **Lighting systems**

Software to go.
Our mvIMPACT Acquire drivers and tools have a user-friendly standard API allowing easy integration into your environment (Windows®/Linux®). Together with the platform-independent smart vision software **mvIMPACT Configuration Studio** you can then achieve complete inspection programs - intuitively and quickly.

Hardware to check.
Flexible testing and setting options with the mv-X I/O-Box.

The box for all developers to configure the mvBlueCOUGAR camera in testing environments: Connecting, testing, looping into systems and mixing connection variants selectively. Let's go!

mvBlueCOUGAR

Next generation GigE camera

- **CCD / CMOS sensors**
- **Resolutions up to 31 Mpixels**
- **>200 full images / sec.**
- **Up to 256 MB image memory**
- **Image recorder**
- **Innovative pre-trigger option**
- **Resend buffer**
- **≤14 bit ADC**
- **Digital I/Os**
- **2 temperature sensors**
- **Many FPGA-based real-time smart features:**
  - ◗ **Real-time flat field correction (14 bit ▸ 14 bit)**
  - ◗ **Micro-PLC (counter / timer and logical operators)**
  - ◗ **Bandwidth control**
  - ◗ **Running frame average (innovative noise reduction with motion compensation)**

Ideas and products Made in Germany

In the industrial image processing area, MATRIX VISION has become an important partner for customers world-wide.

Our strong-points

Aside from our extensive range of standard products we develop custom-specific solutions which provide maximum utility for the user as a result of continuous improvement.

MATRIX® VISION