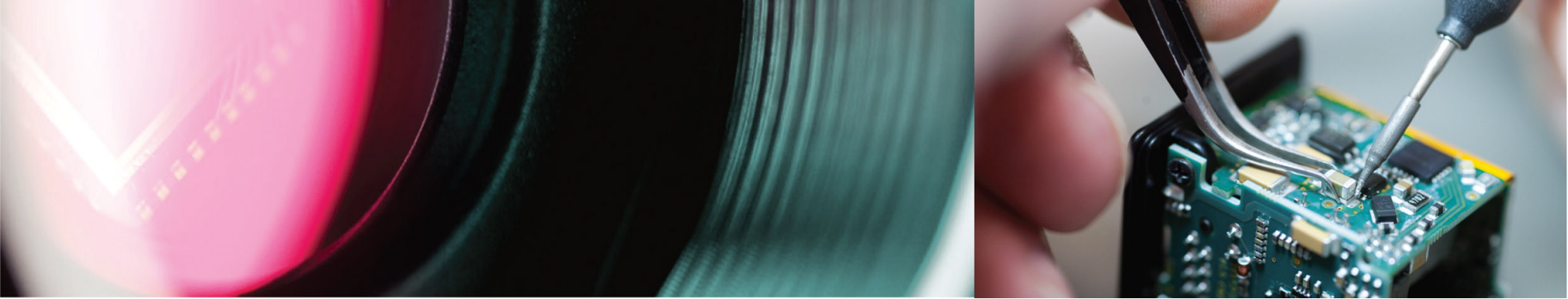# INDUSTRIAL CAMERAS FROM IDS

กล้องอุตสาหกรรมคุณภาพสูง

IT'S SO **EASY!**

iDS

INDUSTRIAL CAMERAS FROM IDS
VERSATILE, EASY AND RELIABLE

IDS Imaging Development Systems GmbH is a leading manufacturer of digital industrial cameras with USB and GigE interfaces.

Boasting more than a decade of experience in development and sale of USB 2.0 cameras, today we are also among the pioneers in the development of digital USB 3.0 industrial cameras. Our cameras help to optimize processes, assure quality, advance research, conserve raw materials, and serve people. They provide reliable and efficient support for your application.

We develop all of our cameras exclusively in Germany, produce them using sustainable methods, and sell them all over the world. A certified quality management system ensures that our processes are effective, and guarantee the exceptional quality and long-term availability of our products.

Our developments focus on broad-based, established technologies from the consumer world. We then modify them to make them suitable for industrial use in equipment, machine and plant engineering in a wide variety of target sectors.

A third of our employees work in hardware and software development and in application engineering. Alongside our highly qualified sales and support team, they are on hand to provide our customers with help and advice before and after purchase.

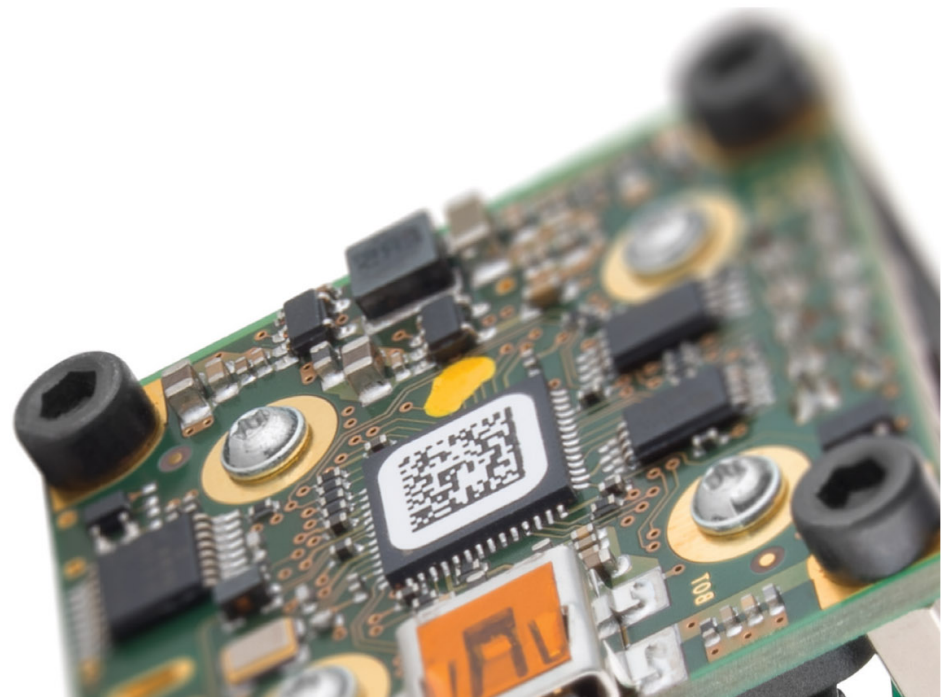**Jürgen Hartmann**
Founder, Owner and Managing Director

Torsten Wiesinger
Managing Director

made in Germany

TÜV SÜD ISO 9001

TÜV SÜD ISO 14001

certified

IT'S SO **EASY!**

uEye CP

ULTRA FAST, POWERFUL, AND FUTURE-PROOF

USB 3.0	GigE	QUALITY TESTED	CALIBRATED
C-MOUNT	SCREWABLE CONNECTOR	GPIOs	PoE POWER OVER ETHERNET
CMOS SENSOR	CCD SENSOR	1 SOFTWARE FOR ALL	PLUG & PLAY
COLOUR CORRECTION	IMAGE BUFFER	TRIGGER & FLASH	PIXEL PIPELINE
NIR SENSOR			

- The standard format in industry: 29x29x29 mm
- Maximum functionality and low CPU utilization
- Maximum frame rates thanks to next generation sensors

Maximum functionality thanks to comprehensive pixel pre-processing (e.g. hardware gamma and LUT) directly in the camera hardware. Ideal for a wide range of applications, including automation, printing industry, logistics and packaging industry, medical technology, microscopy, and robotics.

uEye SE

WELL-PROVEN FOR ALL APPLICATIONS

USB 2.0	GigE	QUALITY TESTED	CALIBRATED
HDR SENSOR	C-MOUNT	BOARDLEVEL VERSIONS	SCREWABLE CONNECTOR
1 SOFTWARE FOR ALL	PLUG & PLAY	CMOS SENSOR	CCD SENSOR
TRIGGER & FLASH	PIXEL PIPELINE	COLOUR CORRECTION	IMAGE BUFFER
NIR SENSOR			

- De-facto standard industrial camera
- Universal installation, can be screwed in from all sides
- Widest range of sensors covers all applications

Proven in industrial use for more than a decade, the uEye SE is the perfect all-rounder for a huge range of applications – from automation to machine construction through to the packaging industry.

uEye RE

THE ALL-ROUNDER FOR EXTREME ENVIRONMENTS

USB 2.0	GigE	QUALITY TESTED	CALIBRATED
C-MOUNT	IP 65/67	SCREWABLE CONNECTOR	PoE POWER OVER ETHERNET
CMOS SENSOR	CCD SENSOR	1 SOFTWARE FOR ALL	PLUG & PLAY
PIXEL PIPELINE	COLOUR CORRECTION	GPIOs	TRIGGER & FLASH
NIR SENSOR	HDR SENSOR	IMAGE BUFFER	

- The most robust and resistant IDS industrial camera
- Dust and spray resistant
- Consistent single-cable solution thanks to M12 circular connector with PoE

The most robust IDS industrial camera for the harshest industrial environments, for example in foundries, industrial production or the food industry, yet still compact at just 41x41x41 mm. M3 and M5 threads provide the ultimate in flexible installation. Easy use on PLC and PC systems thanks to 12-24V DC.

uEye LE

THE ECONOMICAL, SPACE SAVING PROJECT CAMERA

USB 2.0	USB 3.0	GigE	QUALITY TESTED
M 12 LENS HOLDER	NO LENS HOLDER	SCREWABLE CONNECTOR	BOARDLEVEL VERSIONS
CALIBRATED	1 SOFTWARE FOR ALL	PLUG & PLAY	CMOS SENSOR
SINGLE-BOARD CAMERA	GPIOs	I²C	TRIGGER & FLASH
NIR SENSOR	CS-MOUNT	C-/CS-MOUNT	
COLOUR CORRECTION	ADJUSTABLE FLANGE BACK	IMAGE BUFFER	
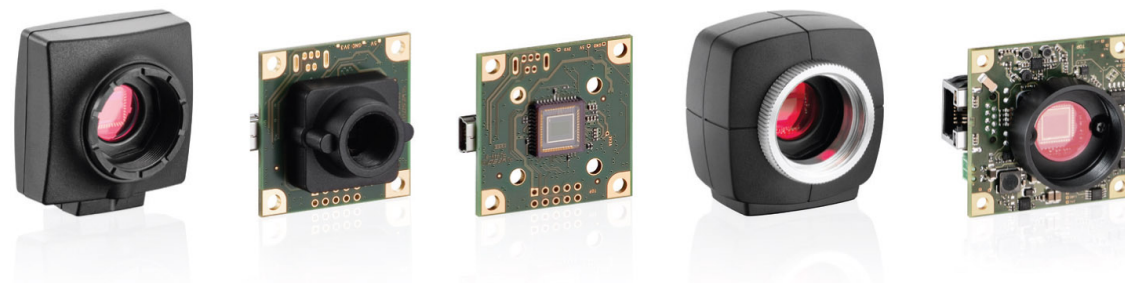
- Focusing on essential functions
- Easy to integrate thanks to compact size
- GigE LE perfectly suited for automation and embedded systems

The perfect component for all projects in small device construction, embedded systems, medical technology, robotics and metalworking. Whether it is installed as a housing with C/CS mount or a single board version with or without M12 lens holder, the comprehensive connectivity means that there are no limits on where the uEye LE cameras can be used.

uEye XS

5 MEGAPIXEL AUTOFOCUS CAMERA

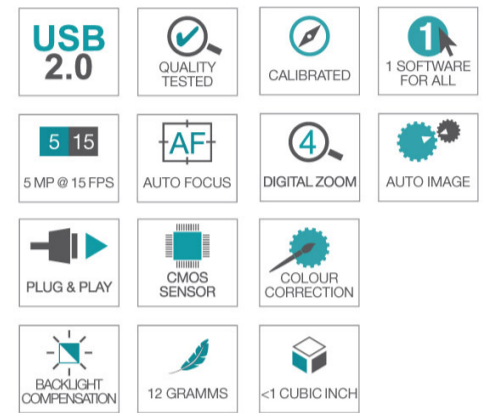| USB 2.0	QUALITY TESTED	CALIBRATED	1 SOFTWARE FOR ALL
5 15 — 5 MP @ 15 FPS	AF — AUTO FOCUS	DIGITAL ZOOM	AUTO IMAGE
PLUG & PLAY	CMOS SENSOR	COLOUR CORRECTION	
BACKLIGHT COMPENSATION	12 GRAMMS	<1 CUBIC INCH	

- Consumer convenience for industry thanks to numerous automatic functions
- Perfect for all space-critical applications thanks to tiny dimensions
- Ideal for quick & uncomplicated entry into Industrial Machine Vision (IMV)

Autofocus, digital zoom and numerous other automatic functions guarantee maximum operating convenience. Thanks to its robust magnesium housing, this tiny, lightweight camera is perfect for IMV and use in embedded systems, medical technology, kiosk systems and biometrics.

uEye ML

THE ALL-ROUNDER FOR EQUIPMENT AND MACHINE CONSTRUCTION

USB 2.0	USB 3.0	QUALITY TESTED	CALIBRATED
NIR SENSOR	CS-MOUNT	SCREWABLE CONNECTOR	GPIOs
1 SOFTWARE FOR ALL	PLUG & PLAY	CMOS SENSOR	
TRIGGER & FLASH	COLOUR CORRECTION	PIXEL PIPELINE	

- The entry-level industrial camera
- Easy integration into complex projects
- Robust housing with screw-on connectors

The camera's compact dimensions – just 40x40x18 mm – make it perfect for applications where space is critical. Easy integration and comprehensive control options thanks to 8-pin HR 25 Hirose connector.
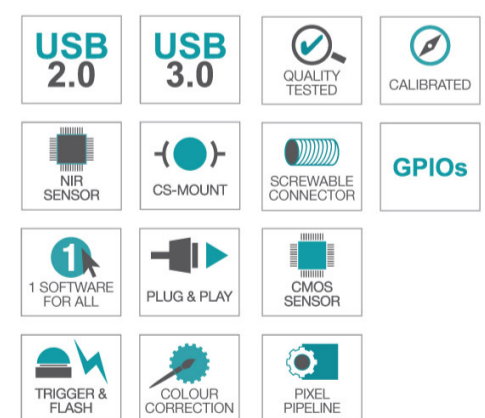
EQUIPPED FOR THE FUTURE.
WITH HIGH-PERFORMANCE CMOS SENSORS

High-resolution, extremely low noise, lightning fast or exceptionally light sensitive: To meet the hugely diverse requirements of different applications, IDS supplies a broad range of almost 50 sensors. They include established CCD and cost-effective CMOS sensors.

From day one, we have been working directly with all well-known sensor manufacturers. This enables us to ensure the outstanding functionality and image quality of our cameras at a high technical level.

Numerous special functions are available for specific applications, such as long exposures, highly dynamic shots or line scanning modes.

Aptina   CMOSIS   e2v   NiT   SONY
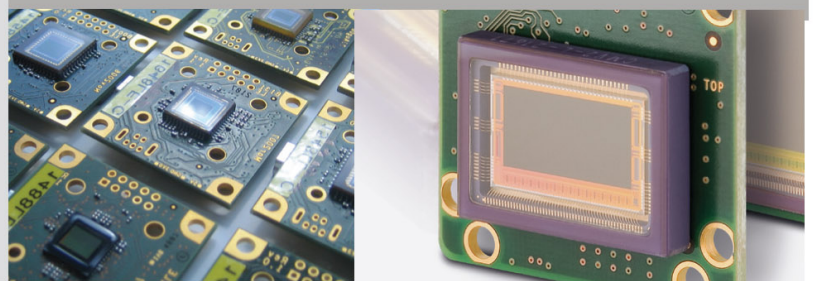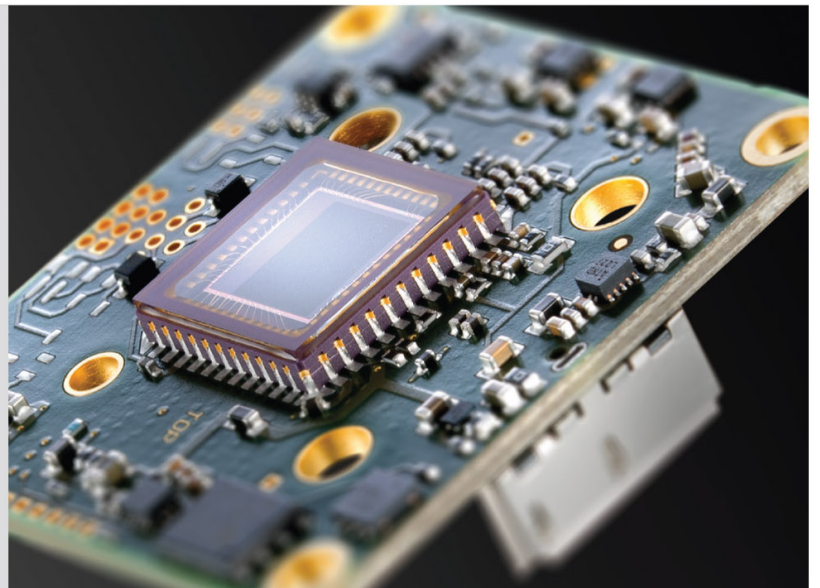
CMOSIS

HIGH RESOLUTION, HIGH SENSITIVITY AND AMAZINGLY FAST: SENSORS FROM CMOSIS

Two CMOS sensors with large, sensitive pixels open up totally new applications thanks to their high frame rates. The 2.2 MP sensor captures images in broadcast quality, e.g. for slow motion pictures. The square 4.2 MP sensor with global shutter is ideal for microscopy and for capturing circular objects. IDS-specific functions include multiple-AOI, HDR mode for increased dynamics, and trigger mode for line scanning camera simulation. The cameras are available with double sensitivity for demanding applications in the NIR range.
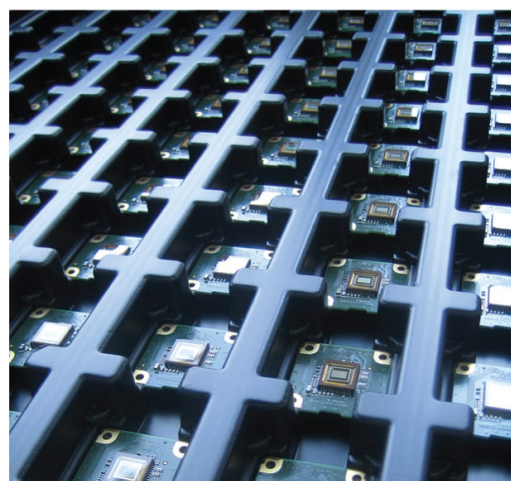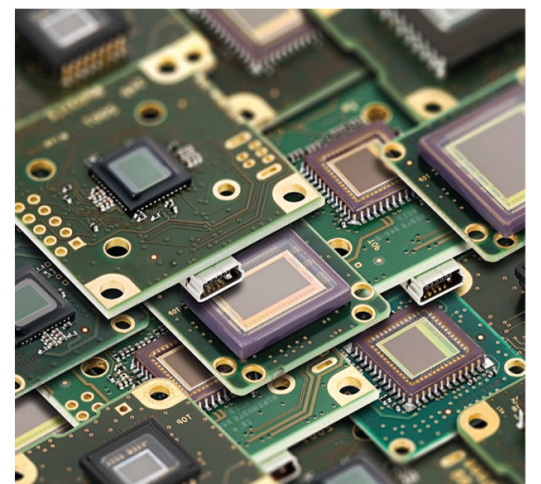
e2v

PERFORMANCE AND INNOVATION IN ONE: SENSORS FROM E2V

High frame rates, outstanding image quality and over a dozen special features make the two 1.3 and 2 MP sensors ideal for changing project requirements. Numerous innovative functions implemented by IDS ensure a maximum range of applications: Multiple AOI and multi-exposure for fast processes, line scanning modes for use as a line scanning camera and log mode for increased dynamics.

THE IDS SOFTWARE SUITE
SUPERBLY SOPHISTICATED, BRILLIANTLY EASY

ONE FOR ALL
FREE, FLEXIBLE, HIGH PERFORMANCE, UNRIVALED

The same software from day one: Developed since 1997, back compatible and with remote update capability. As all necessary drivers are loaded to the camera when it is initially connected, the functionality of cameras already installed is quickly and easily extended by software updates. Superbly sophisticated.

One software solution for all IDS uEye cameras: The IDS software suite allows mixed operation and switching between USB 2.0, USB 3.0 and GigE cameras without changing a single line of program code. Brilliantly easy.

For Windows and Linux 32 and 64 bit systems. Also supports Direct3D
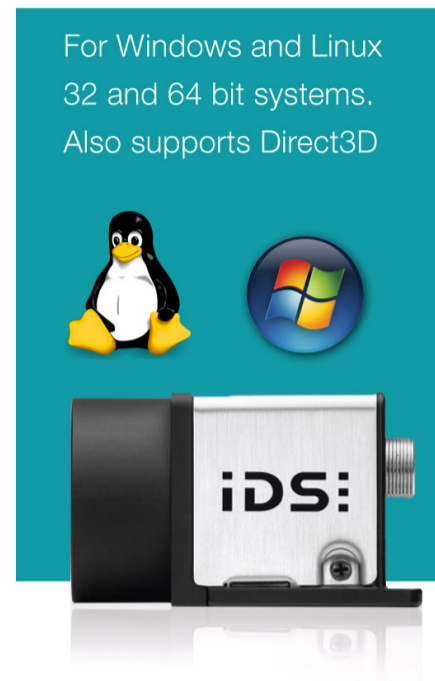
SOFTWARE
BACKED UP BY
HARD FACTS

1 SOFTWARE FOR ALL

Making everything easy – IDS Camera Manager
The central and convenient tool for managing your uEye cameras – regardless of whether they use a USB 2.0, USB 3.0 or GigE interface. The optional expert mode provides detailed information about the cameras.

Everything under control – uEye Cockpit
The Cockpit provides access to all major camera settings and features. From A for AOI to Z for Zoom, you can set all the available functions and parameters on your specific model. Whether you start in simple mode or expert mode, the 15-language Cockpit allows to take extensive measurements – with no programming needed – and allows to easily compare different camera settings.

Open to everything – Example programs
Dozens of example programs in various programming languages, including .NET, C, C++, C# and Visual Basic, make it easy to quickly integrate IDS cameras into your application using the explanatory source code.

All in one solution: The IDS software suite provides quick integration into applications. This saves our customers cost-intensive development time.
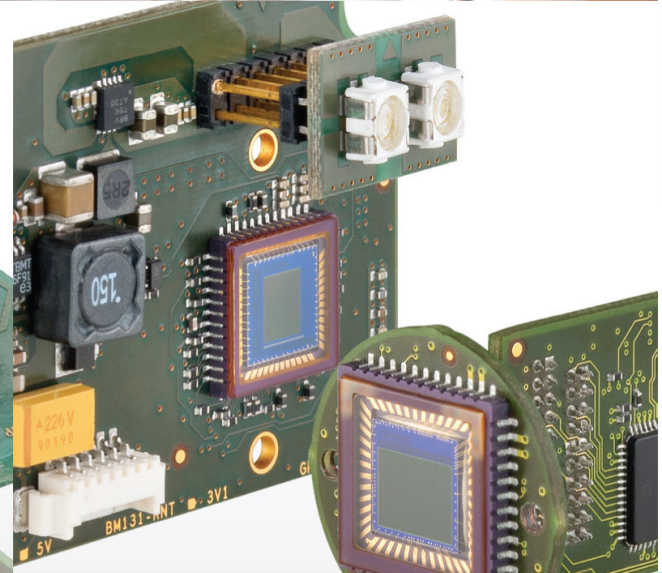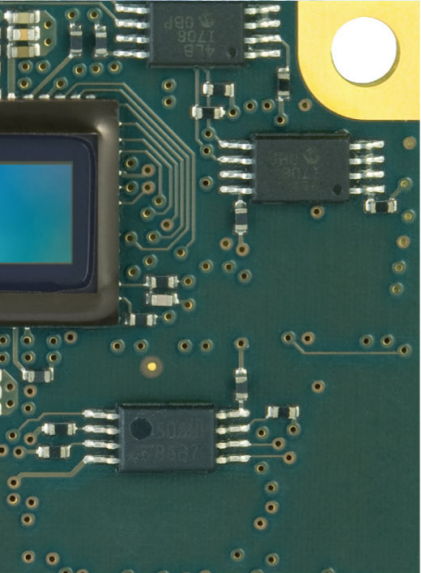
Super fit – 3rd party interfaces
The uEye interfaces support the most popular machine vision libraries, including HALCON, LabView, Common Vision Blox, NeuroCheck and many more. That goes without saying.

POWERED BY
LabVIEW.

NEURO CHECK

HALCON

COMMON VISION BLOX

GEN<i>CAM
TRANSPORT LAYER

USB3
VISION

OpenCV

FROM OBERSULM ALL OVER THE WORLD

IDS INDUSTRIAL CAMERAS
BECAUSE EASY IS SIMPLY BETTER