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The Industry Defies Corona



Last year, I wished you, the readers of the inspect Buyer's Guide, another successful year 2020. At the time of the editorial deadline, no one could have guessed that this year would be completely different than expected due to the corona pandemic.

Nevertheless: From an economic perspective, the machine vision industry came out of a – despite all the difficulties – good year 2019 with a slight sales growth of 1 percent to 2.8 billion euros, reports the VDMA Machine Vision. For the year 2020, the association is now expecting a 20 percent drop in

turnover for "Robotics and Automation", in which machine vision is a sub-sector. There are, however, some signs that things are once again going relatively well for our industry: business in Asia, which is important for many companies, has picked up again significantly since the middle of the year. I also hear from many sides that projects have often been postponed rather than cancelled. And last but not least, manufacturers and integrators have pulled out all the stops in the digital world to enable remote customer support. Not surprisingly, the learning curve was steep in the beginning. On the other hand, valuable lessons have been internalized in 2020 that will also pay off in 2021 and beyond.

So there's only one thing missing this year to really get things going: personal contacts. Because "contacts only harm those who have none." This everyday wisdom is particularly important in 2021. In the Corona year many companies have maintained existing contacts via the digital channel. However, there was a lack of trade fairs, congresses and other events for making new contacts. The inspect Buyer's Guide provides a remedy. Its high relevance as a reference work for the manufacturing industry, mechanical engineering companies and service providers has increased massively in 2020 and will continue to do so in the first half of 2021. Because here, all players in and around the machine vision industry will find all relevant companies, suppliers and experts, even in times when there are no off-site appointments.

Once again, I wish you a successful year. I also hope that you will quickly overcome the aftermath of last year and help shape the future of our industry.

David Löh

Editor-in-Chief of inspect
david.loeh@wiley.com



Lessons have been internalized in 2020 that will also pay off in 2021 and beyond.

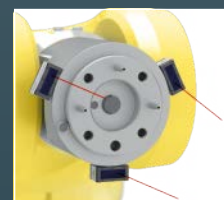


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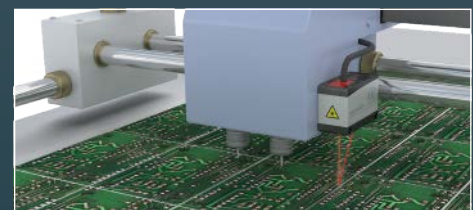
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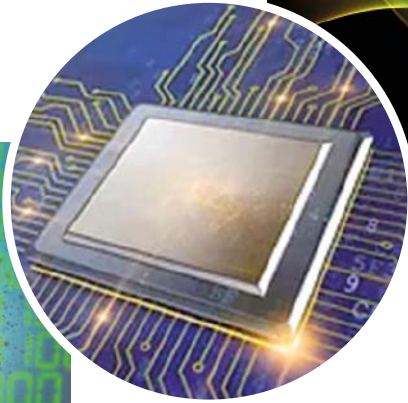
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Machine Vision and Optical Metrology in Europe

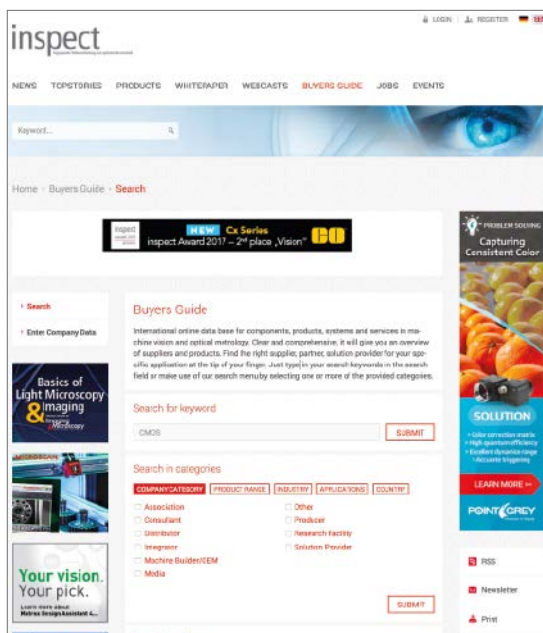
The inspect Buyer's Guide 2021

Throughout the year, we aim to provide you with information about new developments, technological trends, groundbreaking applications, new products and leading companies. Throughout the year, we are faced with the recurring challenge: What to select, what to highlight, what to point out. There is never enough room to cover it all. So once a year we seize the opportunity to present to you a comprehensive overview of the machine vision and optical metrology industries.

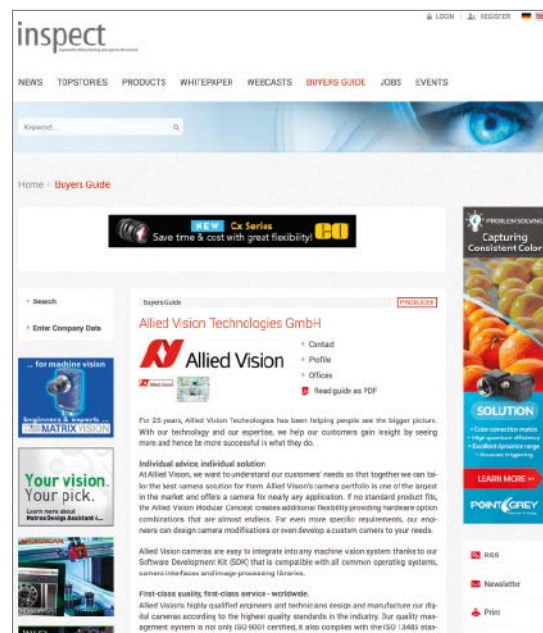
The inspect Buyer's Guide is published in its 12th year now, for the 13th time it also serves as the official Buyer's Guide of the EMVA, the European Machine Vision Association. The guide contains information about more than 500 companies from over 30 countries. The inspect Buyer's Guide has a clear focus on companies doing business in Europe or exporting their goods to Europe. Naturally, this comprises companies and organizations from all over the world.

Online ...

The inspect Buyer's Guide is a true cross-media product. At www.inspect-online.com/buyers-guide the online database



The Online Buyer's Guide provides sophisticated search functions for all listed companies.



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Companies wanting to provide more information and aiming at even better search results are listed with a company profile, including detailed company data and a listing of products offered, industries served and applications catered to. These, and only these, companies will be found in the respective search categories.

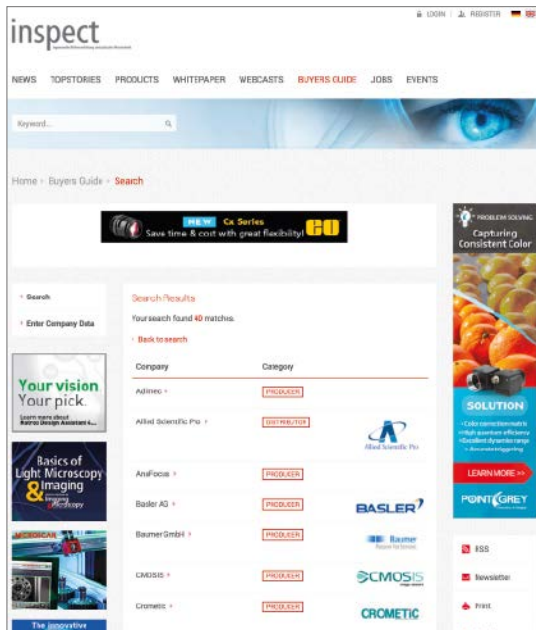
The online Buyer's Guide is open for companies within the scope of the inspect all year round. In this way it is always up-to-date.

... and Print

The availability of data online is a clear benefit when presented with clever search functions. However, sometimes you do not want to bother going online, or you don't want to search specifically but rather obtain a quick overview. In these instances a printed version has its unchallenged advantages. Not to mention the ease-of-use when taking notes right next to the provided data. Thus, once a year the printed edition of the inspect Buyer's Guide is provided to you. With this guide we aim to give you a full overview that is still easy to use, a complete set of information that is still not too subdivided into too many categories.

The inspect Buyer's Guide 2021 is divided into three main chapters: Topics, company profiles for the main global regions, and company listings for the main product categories. In an industry as innovative and dynamic as ours it will most likely never be possible to provide an overview that is final and complete, but we do our best to come as close as possible. ■

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Intelligence Inside

Integrating Intelligent Lighting
into Machine Vision Systems

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The integration of lighting and lenses into a unified control environment for application development and operation improves various aspects and paves the way to Industry 4.0.

While individual components in a machine vision system have their own functionality, the end result is achieved as a result of the way they work together. Optimizing the setup of individual components to achieve the best imaging solution for a particular application can be both time-consuming and challenging. There are therefore compelling arguments for integrating components such as lighting and lenses into a unified control environment for application development and operation. 'Plug & play' intelligent lighting improves the speed and ease

of development of vision solutions, provides advanced lighting control functionality and makes lighting data and information available throughout the system. This also provides the foundations needed for implementation within Industry 4.0, especially in the context of diagnostics and predictive maintenance.

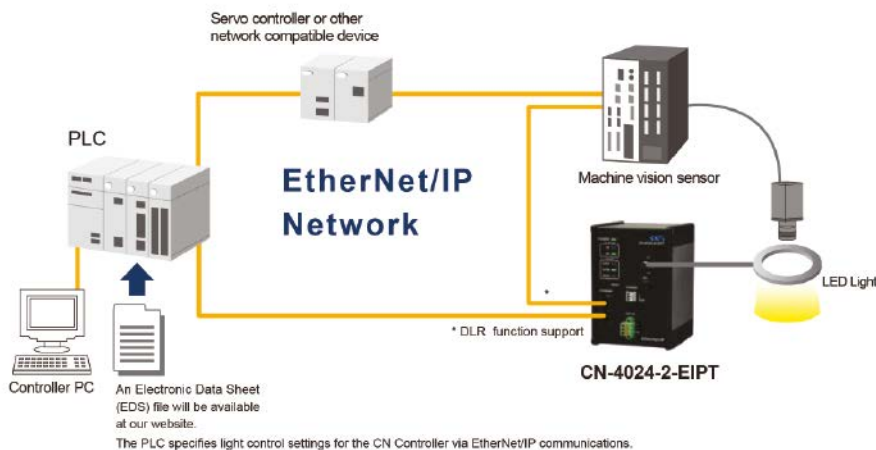
One Environment for Developing Machine Vision Solutions

Setting the correct lighting intensity is a critical factor in optimizing the image required for a particular inspection or measurement using a machine vision system, together with choosing parameters such as the camera gain and exposure time. If the light needs to be strobed and/or overdriven, these parameters will also need to be set. However, if the lighting and camera can be connected and integrated with adjustment through a single interface, it is possible to see immediately the impact that the adjustment of each component is having on the resultant image

in terms of signal to noise ratio, contrast etc. This not only simplifies set up and development but ensures that advanced lighting parameters for accurate strobing and overdriving can be set to synchronize seamlessly with camera triggering and exposure times. This can be particularly important where the use of multiple lights and cameras might require the set-up of complex sequencing configurations. The inclusion of intelligence in the lighting system then brings additional layers of lighting control which can include monitoring, sensing and feedback of lighting intensity to automate lighting performance and further improve illumination consistency.

Facilitating Lighting Set-Up and Control

Delivering sufficient light consistently and reproducibly to an imaging scene is essential to ensure accurate and reliable machine vision measurements. Precise lighting control is critical since a number of factors can affect LED output. These include the maximum rating of the light, the amount of current used to drive it, the temperature of the light (since LED output decreases with temperature) and the number of hours that the light has run (since LED output decreases slowly over time). In addition, for many applications, lights are operated in pulsed mode rather than continuous operation, either to freeze motion, or deliver increased light output or both. By driving the LED with more than its standard current rating (overdriving) in short pulses, more than 100% continuous brightness can be delivered when extra light intensity is needed. Within intelligent lighting, pulse frequency, triggering, duration and intensity can be easily and automatically monitored and controlled to prevent damage to the light. This usage information is also



Lighting control in a PLC environment

Image: CCS Europe

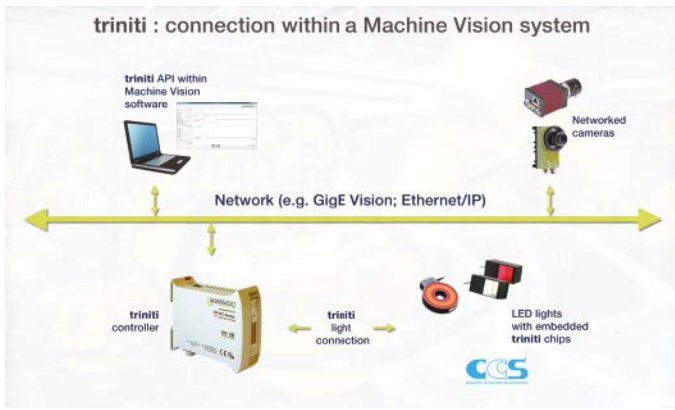


Image: CCS Europe

Open protocol integration of lighting control, cameras and image processing

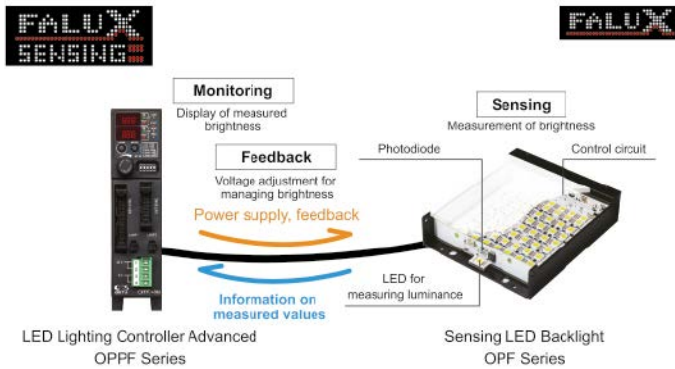


Image: CCS Europe

Fully automated feedback control of light intensity

important for operational or diagnostic purposes as well as a reference for pre-emptive maintenance of the system. This easy control also allows the implementation of more advanced functions including complex sequencing which otherwise might have been considered to need specialist setup. A dedicated lighting controller can be configured to drive the LED in the required manner, but connectivity is critical to achieving an integrated system. Ethernet connectivity lies at the heart of single environment integration for lighting systems in industrial machine vision applications, from PLC-driven automation systems through to GenICam compatible open protocol PC-controlled systems.

Unified Automation and Machine Vision Control Environments

In many industries, particularly automotive and food, automation systems utilize PLCs on industrial networks such as Ethernet/IP. Smart lighting controllers for these types of network provide easy connectivity for lighting setup, control and maintenance. A PLC program editor can be used to set up the lighting control functions such as strobing, overdriving, pulsing or continuous operation. The values for accumulated trigger count, accumulated lighting duration based on light intensity and strobe time, lighting delay and error status can all be made available through the Ethernet/IP network. For PC-controlled machine vision systems, the ideal configuration is an integrated system where control for both camera and lighting parameters is provided through a single software interface in a 'plug-&-play' environment. This makes systems much easier to create, configure and commission. Both open and closed environments are available, and importantly both allow the selection of lights in a variety of form factors, including ring lights, square lights, bar lights, flat lights, dome lights and co-axial lights to allow for an enormous range of applications. Open environments, such as triniti lighting systems from CCS utilize standard machine vision networking and communication architectures such as GigE Vision and GenICam. This approach allows the use of any GigE Vision

camera, together with a lighting controller and intelligent lights from a number of different manufacturers which can store lighting data within the light itself. The control system can automatically access an individual LED's information such as the maximum strobe and over-drive capabilities to help with system configuration. Access to dynamic operational data such as on-time, and hours of operation allows remote diagnostics and data-logging. APIs are available for a number of imaging and application processing software packages to provide a single control interface within the user's preferred image processing environment. Within the Compact Vision System (CVS) space, systems are more typically vendor-specific and their integration of machine vision components commonly utilizes dedicated closed protocols. Nevertheless, a similar lighting integration approach can be applied in these more closed environments, except the set-up and control of the lighting is performed using vendor-specific camera software. Closed configurations may include an integrated lighting controller in the system that can be used with external LED lights, or use specially developed LEDs, which have their own integrated controller.

Extending the Reach of Intelligent Lighting

LED lights used in machine vision are typically assemblies containing a number of individual LEDs. As discussed before, a number of factors affect the intensity output of an LED, including temperature, the length of time that it has run, and any variations in the input voltage. Some specialist applications, particularly in the glass, semiconductor, pharmaceutical and microscopy sectors require very accurate control of lighting intensity over time. To meet these needs intelligent lighting technology has been developed featuring lighting control and illumination feedback functionality. These lights are available in a variety of form factors and feature multiple built-in photodiodes, to allow accurate measurement of individual LED brightness both for continuous operation and in pulsed mode, as well as a temperature sensor. Using constant current circuitry dependent on the input voltage, any variations in the forward current of individual LEDs are corrected to give uniform brightness. In addition, a temperature compensation circuit corrects for fluctuations in brightness due to changes in operational or ambient temperature. Since all operational information is seamlessly available via GenICam these intelligent lighting systems can also be integrated with cameras, imaging software and diagnostic systems for control in a single environment.

Preparing for Industry 4.0

Intelligent lighting solutions are available across a variety of platforms, enabling machine vision systems to be more easily set up and configured both now and in the future. However, with lighting information and data for diagnostics and predictive maintenance readily available over these networks the foundations are also in place for future integration into Industry 4.0-enabled environments, where data exchange between components and subsystems is an essential requirement. One approach to the correlation of automation and machine vision intelligence is the OPC UA platform-independent open standard for machine-to-machine communications. Under the direction of the VDMA Machine Vision Group work has been ongoing on the OPC UA Vision standard which describes the interface between automation and machine vision in a uniform form. Part 1 of this standard has been completed and work has begun on Part 2, which will include investigation of the possible interaction of GenICam and OPC UA Vision adding even greater importance to GenICam compatibility for intelligent lighting systems. ■

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“Machine Vision Distribution Never Was Just Box Shifting”

Interview with Antoine Hide, CEO of Macnica ATD Europe



Antoine Hide, CEO of Macnica ATD Europe

Antoine Hide, CEO of the imaging distributor ATD Electronique recently acquired by Macnica and renamed Macnica ATD Europe, talks about the changes within the machine vision industry. In particular, new technologies, such as artificial intelligence, and market participants are discussed. In addition, Hide explains the impact of the corona pandemic on the industry, including a cautious outlook for 2021.

inspect: Mr. Hide, 30 years ago you founded ATD Electronique. Which were the milestones in the company's history?

A. Hide: ATD itself was founded in April 1990, and after the acquisition of ATD Electronica – our parent company at the time – by Arrow, my partner and I in 1992 bought out the shares held by our Spanish friends allowing full ownership of the company. In the following years the company grew organically, two subsidiaries were created and in 2002 the distribution contract with Sony was expanded to a European contract. Finally, I started to think about passing on my responsibilities into other hands and found the right partner in Macnica. After a first transfer of company shares in 2016 the remaining 51 percent of ATD shares were sold to Macnica Inc. last year. The next and clearly visible step is the renaming of the company into Macnica ATD Europe effective of October 1, 2020.

inspect: Currently the industry undergoes a transition process never seen before. New technologies bear new players on the field with business models that often are not any more rooted in traditional machine vision. What was machine vision distribution back then in 1990, and what is it nowadays?

A. Hide: When Sony started deliveries of image sensors in Europe in the mid-90s I remember that the quantities were strictly confidential, although it still represented a rather small business for Sony at that point. These

days, there was only CCD sensors and their datasheets were less than 20 pages long. This meant that camera developers needed almost no technical support, they designed a camera in a few weeks and sometimes they even allowed themselves to fix some bugs in the datasheets. Today, the diversity of image sensors, their technology and the complexity of their use impose to a company like ours to have a competent technical team to provide technical support to our customers.

Company in Detail

Macnica

Macnica, which recently took over ATD Europe completely, is a globally active technology solutions distribution group founded in 1972 in Tokyo. The company is a subsidiary of stock listed Macnica Fuji Electronics Holdings. Macnica represents over 200 suppliers and has over 3,000 employees in 24 countries worldwide. About one third of the staff are engineers.

After a first transfer of company shares of ATD to Macnica in 2016 the remaining 51 percent of ATD shares were sold to Macnica Inc. in 2019. The renaming of the company into Macnica ATD Europe was effective of October 1, 2020.



inspect: How will machine vision distribution at your level in the value chain look like in, say, five years' time?

A. Hide: This is a very relevant question that my successor at the head of the company will have to answer. But I know that Macnica Group's management foresees this change e.g. in terms of new technologies with the advent of artificial intelligence and is getting prepared. In general, machine vision distribution never was just box shifting and we foresee that our business will evolve even more in the direction of solutions and service as an add-on to the components. These service and advisory benefits will heavily contribute to the future justification of distributors in the value chain as they require a high amount of highly skilled manpower.

inspect: How would you describe the impacts the Corona crisis had on the machine vision industry and in particular Macnica ATD Europe?

A. Hide: This unprecedented crisis for all of us has of course had several types of impacts. Before talking about the financial impact, I would first like to mention the human aspects. This crisis allows individuals to reveal themselves, especially those who are resilient and remain effective. It has changed our behaviours, our work habits with home-based work, the videoconferencing that has so quickly taken such a place in our daily lives. It keeps us awake while bringing us its share of worries. Still beyond the health and financial aspects, the biggest inconvenience in my opinion remains the impossibility to meet face-to-face with customers and partners in particular during trade shows. This year, we had high expectations like everyone else I guess, especially with Vision show and Electronica. Now we need to consider other, predominantly virtual options to communicate with our partners and customers.

In terms of activity, we are positively surprised that our business has been resilient throughout this difficult period and tends to even outperform the 2019 numbers. Some projects around biotech, for example, are very promising. However, we feel that this growth is fragile and maybe even unnatural. The visibility of our customers has suffered due to the Corona crisis making forecasts difficult and thus orders are placed much more short-term based than before. We prepare for a drop in demand for cameras and image sensors in the near future as a result of the slow down in global production due to the pandemic. The question remains "when" this will happen and "how brutal" it will be. Needless to say, if this worst-case scenario did not happen, we would all be very happy. ■

The interview was held by Andreas Breyer,
CEO of Vision Communications.

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Speeding Up Machine Vision

A Digression into CoaXPress-over-Fiber

CoaXPress-over-Fiber is a light but significant extension of the existing CoaXPress specification to support transport over fiber optics.

CoaXPress (CXP) is the de-facto standard for high-bandwidth computer vision applications. CoaXPress 2.0, the latest version of the specification, specifies the CXP-12 speed, a 12.5 Gbps (Gigabit per second) link over a coaxial copper cable. As link aggregation is common with CoaXPress, bandwidths of 50 Gbps (12.5 x 4) are easily achievable with four CXP-12 links. The CoaXPress specification is hosted by the JIA (Japan Industrial Imaging Association).

CoaXPress-over-Fiber has been designed as an add-on to the CoaXPress 2.0 specification. It provides a way to run the CoaXPress protocol, as it is, unmodified, over a standard Ethernet connection, including fiber optics. As such, CoaXPress-over-Fiber uses standard electronics, connectors and cables designed for Ethernet, but the protocol is CoaXPress, not Ethernet, not GigE Vision.

Euresys and Sensor to Image have started the development and demonstration of CoaXPress-over-Fiber in 2018. Since early 2020, Euresys and the CoaXPress Workgroup, which includes most major vision manufacturers, are working within the JIA on

the review of the specification as an add-on to the CoaXPress standard.

What are the advantages of using Ethernet Connectivity?

By using Ethernet connectivity, CoaXPress-over-Fiber will benefit from the low-cost standard equipment (such as connectors and cables) designed for Ethernet. Ethernet is defined by IEEE 802.3 standards; by leveraging these standards, CoaXPress-over-Fiber will also benefit from the constant evolution of Ethernet towards higher bandwidths.

What are the pros and cons of using fiber optics?

Pros: First and foremost, cable length is not an issue anymore as fiber connectivity is basically not limited in length.

Fiber optics provide more bandwidth, as connectivity at 10 and 25 Gbps per fiber is standard today and widely used in data centers.

Fiber optics are immune to electrical noise, which will be a significant advantage on the production floor in and some medical applications.

Fiber optics are lighter and smaller in size than the equivalent copper cabling, making it appropriate for applications where this characteristic is essential, like in aircrafts or vehicles.

Cons:

There is no “power over fiber.” As signals in fiber optics are transmitted using light, there is no way to transfer power over fiber optics and devices such as cameras must be powered separately.

What does CoaXPress-over-Fiber mean for camera manufacturers?

As CoaXPress-over-Fiber is an add-on to the CoaXPress standard, existing CoaXPress cameras can relatively easily be upgraded to CoaXPress-over-Fiber, without any significant redevelopment or test of a new protocol.

FPGAs already in use in CoaXPress cameras include many features to support the Ethernet standard. The 10 Gbps Media Independent Interface (XGMII), defined in IEEE Std 802.3 Clause 46, is the main access to the 10G Ethernet physical layer. The generic nature of this interface facilitates mapping the CoaXPress signaling into the PCS/PMA Ethernet sublayers. The use of the XGMII also allows CoaXPress to be ready to support higher bandwidths via the 25 Gbps Media Independent Interface (25GMII), defined in IEEE Std 802.3 Clause 106. The 25GMII is a speeded-up version of the XGMII while being logically equivalent to it.

Sensor to Image, a Euresys company, already provides CXP to XGMII and XGMII to CXP IP Cores for evaluation.



40GBASE-SR4 QSFP+ Optical Transceiver Module for multi-mode fibers



40GBASE-ER4 QSFP+ LC DOM Optical Transceiver Module for single-mode fibers

What is the bandwidth of CoaXPress-over-Fiber?

The initial configuration of CoaXPress-over-Fiber is 4 x 10 Gbps on a single QSFP+ module for a total of 40 Gbps per camera. This represents exactly the same net bandwidth as four CXP-12 links over four copper coaxial cables. There is however a clear upgrade path for CoaXPress-over-Fiber towards 4 x 25 Gbps = 100 Gbps with, for example, QSFP28 modules and 4 x 50 Gbps = 200 Gbps with QSFP56 modules.

What does CoaXPress-over-Fiber mean for end-users?

By leveraging Ethernet connectivity, CoaXPress-over-Fiber will benefit from the low-cost standard equipment (such as connectors and cables) designed for Ethernet, as well as the constant evolution of Ethernet towards higher bandwidths. End-users can expect products that satisfy the future demand for higher resolution imaging as well as higher inspection speed and reliability.

What are the cable options for CoaXPress-over-Fiber and what is the maximum cable length?

One of the most important benefits of CoaXPress-over-Fiber is the wide variety of connectivity options already available from multiple companies. The initial connectivity options for CoaXPress-over-Fiber at 10 Gbps are SFP+ and QSFP+ (Quad, or four times SFP+) modules.

The advantage of using modules compared to fixed interfaces is that ports can be equipped with any suitable type of transceiver as required by the application. A variety of transmitter and receiver types is available, allowing users to select the appropriate transceiver to provide the required optical reach over multi-mode or single-mode fiber.

The first option is using a 40GBASE-SR4 QSFP+ Optical Transceiver Module for multi-mode fibers. It uses an MTP/MPO fiber connector with a maximum 150-meter fiber

optic cable. This solution is suitable for machine vision applications.

The second option is using a 40GBASE-ER4 QSFP+ LC DOM Optical Transceiver Module for single-mode fibers. It uses an LC-Duplex fiber connector with a maximum 40-km fiber optic cable. This solution is suitable, for example, for video transmission applications.

Breakout active optical cables are also available. They feature a 40G QSFP+ transceiver (for the frame grabber) on one side and four 10G SFP+ transceiver (for four cameras) on the other side.

These solutions are future proof as higher speed options are already available. The SFP28 iteration is designed for speeds of 25 Gbps. The QSFP28 (Quad SFP28) variant allows speeds up to 100 Gbps. Already in 2019, QSFP56 was standardized, doubling the top speeds to 200 Gbps with products already selling from major vendors. There are also inexpensive adapters allowing SFP transceivers to be placed in a QSFP port.

What are the benefits of using CoaXPress-over-Fiber for my application?

- Ultra-high data/frame rates,
- many accessory and cabling options to cover any length requirement,
- low CPU overhead, low latency, low jitter image acquisition,
- highest camera count per PC performance,
- very competitive cost/performance ratio,
- wide industry acceptance due to J11A and IEEE standardization.

What are the jitter and latency of CoaXPress-over-Fiber? How do they compare to "traditional" CoaXPress?

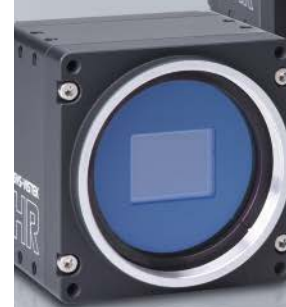
CoaXPress-over-Fiber is based on the CoaXPress protocol and it exhibits the same high performance as CoaXPress in terms

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Scale your vision.

TOPICS

of jitter and latency. In addition, as CoaXPress-over-Fiber supports higher transmission speed compared to CoaXPress, the jitter and latency will be further improved in these versions.

How do CoaXPress and CoaXPress-over-Fiber compare with other vision interfaces in general?

CoaXPress is successful because of its unique combination of

- high bandwidth,
- low latency (including trigger latency),
- high stability/reliability.

CoaXPress-over-Fiber is CoaXPress, it will keep and further develop the same advantages.

How do CoaXPress and CoaXPress-over-Fiber compare with GigE Vision?

In terms of image transfer bandwidth, CoaXPress and CoaXPress-over-Fiber easily support link aggregation and most CoaXPress cameras currently use two or four links. Similarly, CoaXPress frame grabbers offer from one to eight connections per card. The initial configuration of CoaXPress-over-Fiber is 4 x 10 Gbps for a total of 40 Gbps (the same net bandwidth as four CXP-12 links). There is a clear upgrade path towards 8 x 10 Gbps = 80 Gbps, 4 x 25 Gbps = 100 Gbps and 4 x 50 Gbps = 200 Gbps.

On the contrary, link aggregation with GigE Vision is difficult and most GigE Vision cameras use only one link.



Euresys' new Coaxlink QSFP+ is compatible with QSFP+ optical transceivers

In terms of image acquisition stability, the data packet management of the CoaXPress protocol is simpler. It is done by the frame grabber or interface card, using dedicated hardware, ensuring low latency and stable image acquisition without loading the host CPU.

On the contrary, GigE Vision applications use standard Network Interface Cards (NIC) where data packet management is done by the driver, while significantly loading the host CPU.

Overall, CoaXPress provides more stable, reliable image transfer without loading the host CPU. This will be even more true at higher speeds.

What operating systems are supported?

CoaXPress-over-Fiber is independent from any operating system. As of today, CoaXPress frame grabbers support Windows,

Linux, macOS and/or specialized embedded Operating Systems; the same will apply to CoaXPress-over-Fiber.

Will CoaXPress-over-Fiber cameras work with GenICam compatible software?

Yes, CoaXPress-over-Fiber is an add-on to CoaXPress, they both include mandatory support for GenICam.

What is the status of the CoaXPress-over-Fiber standard?

Euresys and Sensor to Image have started the development and demonstration of CoaXPress-over-Fiber in 2018. Since early 2020, Euresys and the CoaXPress Workgroup, which includes most major vision manufacturers, are working within the J1A on the review of the specification as an add-on to the CoaXPress standard.

The publication of the final specification is expected in the coming months.

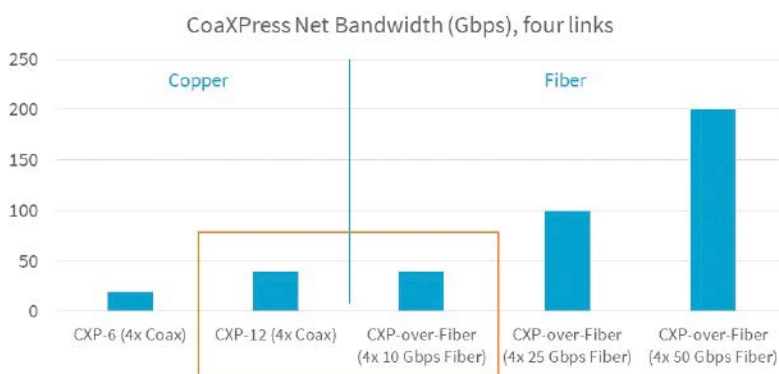
Meanwhile, an "Optical Interface Guideline for CoaXPress" which details fiber optics connector options for CoaXPress has been published by the J1A in January 2020.

Which CoaXPress-over-Fiber products are available?

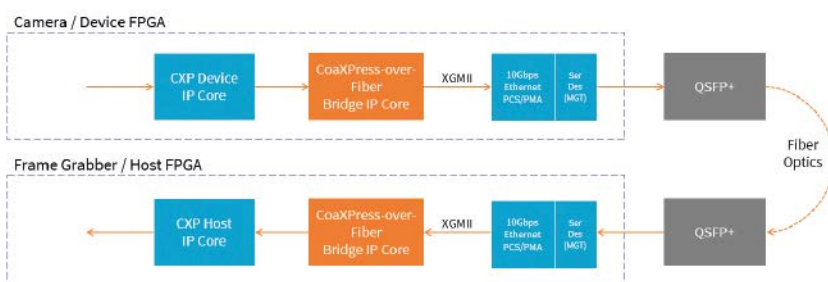
The CoaXPress-over-Fiber standard has not been officially approved yet. However, the following products are available for evaluation:

- The Coaxlink QSFP+, a CoaXPress-over-Fiber PCIe frame grabber with a QSFP+ cage providing four bidirectional 10 Gbps links is available from Euresys to camera makers.
- A CoaXPress-over-Fiber Bridge IP Core is available from Sensor to Image to camera makers. ■

The evolution of CoaXPress and CoaXPress-over-Fiber bandwidth



CoaXPress-over-Fiber IP Core integration



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Company Profiles

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About AutoVimation

AutoVimation builds protective camera enclosures and provides a wide range of accessories that allow the use of vision systems in almost any environment. Thanks to the



patented camera mount, the enclosure works like a heat-sink and cools the installed camera, so it can be used in higher ambient temperatures. Water and Peltier cooling systems enable the operation of cameras between -40°C and +200°C.

The „Machine-Vision Construction Kit“ based on dovetail profiles makes it easy to mount

cameras, lights and other components to a machine using pre-fabricated parts.

New Products 2020:

- The IP69k Dolphin and Shark range of stainless steel enclosures in hygienic design
- The compact Meganova LED ring light with on-board strobe controller
- Fine positioning linear axis for accurate camera placement



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Management

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Foundation
 2008

Staff
 6

Products

Protective Camera and Laser Enclosures and Accessories, LED Ring Light, Mounting Equipment, R&D, other

Applications

Character Recognition, Digitalization, High Speed Analysis, Inspection Piece Parts, Inspection Webbed Material, Material Testing, Metrology 2D/3D, Robot Vision 2D/3D, Particle Analysis, Part Identification, Symbol Recognition, Thermography

Industries served

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Companies represented
 Swivellink

Associations
 VDMA

Regions served

Africa, Asia, Australia, China, Central Europe, EMEA, Europe, Japan, Latin America, North America, national, ROW

About Edmund Optics

Edmund Optics, leading global manufacturer and distributor of precision optics, optical assemblies and imaging components, with headquarters in the US, manufacturing facilities in the US, Europe



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Foundation

1942 in USA, 2000 in Germany

Staff appr. 1,000

Products

Cameras, Imaging Lenses, Lighting Equipment, Microscopes, Optics, Optical Components, etc.

Industries served

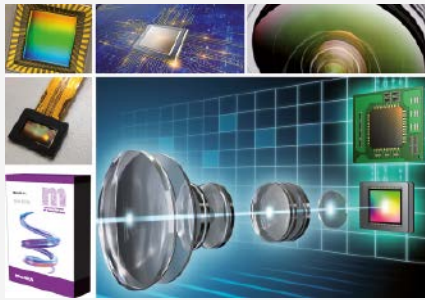
Electronics/Semiconductors, Medical Technology, Mechanical Engineering, Line Building, Pharmaceutical, Cosmetics, Chemical, Precision Engineering, Optics, Machine Vision, Traffic, Logistics, etc.

Associations
 AIA, EMVA, JIIA

Regions served Worldwide

About Macnica ATD Europe

Macnica ATD Europe looks back on 30 years of trusted imaging solutions. Founded in 1990 as ATD Electronique, the company distributes innovative components dedicated to imaging applications for the European market. Its product portfolio includes image sensors (CCD, CMOS, InGaAs, etc.), optics, interface circuits, IPs, imaging processors, cables and M-OLED displays. It also covers development tools and design services enabling fast and efficient realization of high-performance camera systems.



Following the acquisition by Macnica Inc. the company now operates as Macnica ATD Europe and also distributes various Macnica hardware and software IP solutions with an extended network of technical support and an expanded brand portfolio.



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Sales Director
Clemence Boudot,
Engineering Director

Foundation

1990

Staff

30

Products

Interfaces/Cables/Peripherals,
Optical Instruments, Optics, Pro-
cessors, Software, Vision Sen-
sors, Other

Applications

Character Recognition,
Digitalization, High Speed
Analysis, Inspection Piece Parts,
Material Testing, Metrology 3D,
Part Identification, Robot Vision
2D/3D, Thermography

Companies represented

Sony, Ams Sensors (CMOSIS,
Awaiba), Caeleste, Corning-
Varioptic Lenses, Tamron, Helion
Vision, eMPIA, Macnica, Lattice,
Tachysséma

Regions served

Central Europe, Europe,
national

Associations

EMVA

About Matrix Vision

Matrix Vision is a leading manufacturer and offers a large spectrum of digital cameras – from USB, GigE with Power over Ethernet to smart cameras with integrated easy configurable machine vision software. A wide range of USB 3.0 cameras with CMOS sensors up to 31 megapixels are provided with the USB3 Vision Standard. At the moment Matrix Vision is going to expand its cost-effective and compact board-level camera series for embedded vision. Furthermore, Matrix Vision will introduce a new 10GigE camera shortly. Besides an extensive range of standard products we offer custom solutions,



which provide maximum utility for users as a result of continuous development. By belonging to the Balluff family, our customers benefit from a global sales and support network.

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Key Account and Industry Man-
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Marcus Bleise, Head of Global
Sales

Foundation

1986

Staff

100-200

Products

Embedded Vision Cameras,
Digital Cameras, Smart
Cameras, USB 3.0 and GigE
Cameras, Software

Applications

High Speed Analysis, Inspection
Piece Parts, Inspection
Webbed Material, Material
Testing, Metrology 2D, Part
Identification, Particle Analysis,
Robot Vision 2D, Symbol
Recognition, Others

Industries served

Automotive and Suppliers,
Electronics/Semiconductors,
Energy/Water/Solar Technol-
ogy, Foodstuffs/Beverages,
Glass/Ceramics, Mechanical
Engineering/Line Building,
Medical Technology, Metal,
Packaging, Paper/Wood,
Pharmaceuticals/Cosmetics/
Chemicals, Plastics, Precision
Engineering/Optics/Machine
Vision, Traffic/Logistics, Other

Associations

AIA, VDMA, PPMA

Regions served

Africa, Asia, Australia,
Central Europe, China, EMEA,
Europe, Japan, Latin America,
North America

About Micro-Epsilon

Micro-Epsilon is a medium-sized family-run company which plays a leading role in measurement technology. For more than 50 years we have continuously offered reliable, high performance, unique solutions particularly when high precision measurement or inspection is required. Our product range covers sensors for the measurement of distance and displacement, sensors for IR temperature measurement and color detection, as well as



systems for dimensional measurement and defect detection. Innovative products that provide the highest level of precision are created through intensive research and development processes, unique know-how and a broad network of collaborative operations.



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Products

Vision Sensors/Smart Cameras, Optical Instruments, Turn-Key Systems, Other

Applications

Inspection Piece Parts, Metrology 2D, Metrology 3D, Robot Vision 2D, Robot Vision 3D, Part Identification, High Speed Analysis, Thermography

Industries served

Automotive and Suppliers, Electronics/Semiconductors, Foodstuffs/Beverages, Glass/Ceramics, Mechanical Engineering/Line Building, Medical Technology, Metal, Paper/Wood, Pharmaceuticals/Cosmetics/Chemicals, Plastics, Precision Engineering/Optics/Machine Vision, Traffic/Logistics

Associations

AMA

Regions served

Asia, China, Europe, North America, South/Central America, national

About Optics Balzers

Optics Balzers is the innovative and independent industry partner for the development and production of coated optical components and sub-assemblies. The company is part of Materion Cooperation and possesses a broad and in-depth know-how in optical thin-film coating processes, complemented by sophisticated patterning, glass bonding and sealing, and further processing capabilities necessary for producing optical thin-film coated components up to optical sub-assemblies.

Highly experienced and skilled development and engineering teams closely collaborate with customers to develop innovative solutions meeting their requirements and design robust processes to manufacture the customer specific components. The combination of these capabilities and skills places Optics Balzers at the forefront of markets in the photonics industry such as Life Science, Industry, Consumer, Space, Automotive, and Lighting.



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Foundation
 2009 / 1946

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Products

Optics, Optical Coatings, Optical Components

Industries served

Automotive, Medical Technology, Packaging, Precision Engineering/Optics/Machine Vision, Others

Applications

Others

Regions served

Asia, EMEA, Europe, North America



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About Opto



Multi-fluorescence, flow cytometry, laser-integration and microfluidic lab on a chip imaging applications, for the integration into machines or POCT devices are our daily business.

Opto produces intelligent digital microscopes and vision sensors as imaging modules and job modules for medtech and industry applications in standard and custom versions.

We deliver AI ready images and specific DATA sets to be implemented into biomed screening machines and industry 4.0 solutions.

Opto designs and produces standardized job modules with special software for dedicated applications. Plug and operate.

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Foundation

1980

Staff

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Products

Imaging Modules, Digital Microscopes, Custom OEM Modules, Job Modules, Vision Sensors, Software

Applications

Flow Cytometry, Microfluidic, Cell Analysis, Inspection, Material Testing,

Industries served

Biotechnology, Automotive and Suppliers, Electronics/Semiconductors, Mechanical Engineering, Medical Technology, Metal, Precision Engineering/Optics/Machine Vision, Molecular Biology, Pathology, Oncology, Bioscreening, Medtech, Machine Vision, Microscopy, Ophthalmology, IVF

Associations

AIA, EMVA, VDMA, Bayern Photonics, EPIC

Regions served

Asia, Australia, China, EMEA, Europe, Japan, Latin America, North America

About SVS-Vistek

SVS-Vistek GmbH is an innovative manufacturer of high-quality cameras for industrial image processing for more than 30 years. We offer unique know how and experience in the field of machine vision. We exclusively develop and produce a wide range of standard industrial cameras as well as cameras with highest picture quality and all relevant interfaces in our own clean rooms at our headquarters in Seefeld near Munich: Quality Made in Germany!



With powerful components such as lenses, lighting, filters, frame grabbers and cables, we support customers in the realization of economical and, if necessary, individual image processing solutions for a wide range of industries.

Management

Dipl.-Phys. Walter Denk, CEO
B.Sc. (Dipl.-Ing.) Henrik Ilsby, Procurement

Foundation

1987

Staff

60-100

Products

Cameras, Consulting, Frame Grabber, Integration Services, Interfaces/Cables/Peripherals, Lighting Equipment, Optics, Software, Vision Sensors

Applications

Character Recognition, High Speed Analysis, Inspection Piece Parts, Metrology, Part Identification, Robot Vision, Symbol Recognition, Others

Industries served

Automotive and Suppliers, Electronics/Semiconductors, Energy/Water/Solar Technology, Foodstuffs/Beverages, FPD Quality Control, Glass/

Ceramics, Mechanical Engineering/Line Building, Metal, Packaging, Paper/Wood, Pharmaceuticals/Cosmetics/Chemicals, Plastics, Precision Engineering/Optics/Machine Vision, Traffic/Logistics

Companies represented

Euresys, Kowa, Moritex, Myutron

Associations

AIA, EMVA, VDMA, CMVU, JIIA

Regions served

Asia, Central Europe, China, EMEA, Europe, Japan, Latin America, North America



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About Ximea

Ximea develops, manufactures, and distributes industrial and scientific cameras. These high-end and specialized cameras utilize modern CMOS and sCMOS sensors, combined with high-bandwidth USB3, Thunderbolt and PCIe interfaces. Among Ximea's core competencies, you will find the smallest form factors around any given sensor package, robust housings, high-speed interfaces with low latencies, power-efficiency, and versatile implementation options.

A 50/50 mix of OEM solutions and series production guarantees innovative and technology driven projects, together with a reliable supply and support.

Ximea serves all types of tech companies around the world,

from global players to small start-ups. Its camera technologies allow the customers to make their applications possible, or to elevate their products into new levels.

Together with the client, Ximea is facing all specific requirements and solves individual challenges, not only with standard products but also with modifications or full custom designs.

The latest innovations include tiny USB3 cameras, PCIe streaming cameras (high-speed, ultra-resolution 8K and beyond, large sensor formats), cooled scientific and hyperspectral imaging cameras, X-Ray and a multi-camera platforms for high-bandwidth applications.

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Foundation
2010

Staff
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Products

Hyperspectral-, X-Ray-, USB-,
PCIe-, Subminiature Cameras,
OEM Cameras



Applications

Astronomy, (Aerial) Mapping,
Digitalization, Metrology 2D/3D,
Microscopy, Part Identification,
Particle Analysis, Robot Vision
2D/3D, Symbol Recognition,
Virtual Reality, Other

Industries served

Agriculture, Automotive and
Suppliers, Defense, Electronics/
Semiconductors, Embedded
Vision, Machine Vision, Medical
Technology, Packaging, Paper/
Wood, Plastics, Traffic/Logistics,
UAV, Other

Associations

AIA, EMVA, VDMA, Embedded
Vision Alliance, Other

Regions served

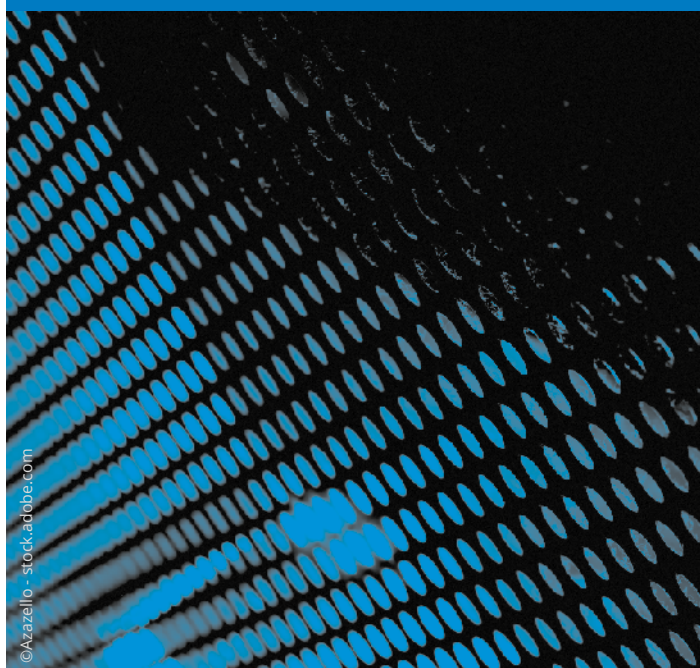
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Showcase



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These cameras use fast and high-resolution CMOS sensors and stream images with up to 64 Gbit/s to the host computer. The updated portfolio includes the CB654 with 65.4 Mpix@76 fps and CB262 with 26.2 Mpix @150 fps.

USB3 Vision camera series:

With this line of extraordinary small, lightweight, fast, efficient and highly customizable cameras, XIMEA offers a unique value and performance for the industrial market. The perfect fit for OEMs and system integrators.

Hyperspectral imaging cameras:

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Scientific grade cameras:

For the most demanding applications that require the ultimate image quality. With large pixels, high resolutions, 16 bits dynamic range, low noise and high sensitivity. The utilized technologies include medium formats, back-thinned sCMOS, X-Ray, and subzero peltier cooling.



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Producer

Adlink Technology provides a wide range of embedded computing products and services to the test & measurement, automation & process control, gaming, communications, medical, network security, and transportation industries. Adlink products include ETX and COM Ex-

press modules for industrial computing, AdvancedTCA, CompactPCI, PCI Express-based data acquisition and I/O and vision and motion control. Adlink provides customization and system integration services, and maintains low manufacturing costs.

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Producer

Founded in 1983, Advantech is a leader in providing trusted, innovative products, services, and solutions. Advantech offers comprehensive system integration, hardware, software, customer-centric design services, embedded systems, automation products, and global logistics support. We cooperate closely with our partners to help provide complete solutions for a wide array of applications across a diverse range of industries. Our mission is to enable an intelligent planet with Automation and Embedded Computing products and solutions that empower the development of smarter working and living.

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Producer, Solution Provider

Software: Image processing toolkit heurisko Quick heurisko-based custom image processing solution
Camera and image sensor testing according to EMVA 1288 and beyond: Measuring services Customizable test equipment Consulting.

Education: EMVA 1288 standard computational imaging 3D image acquisition Technical optics for image processing

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Research Facility

The AIT Austrian Institute of Technology, Austria's largest non-university research institute, is among the European research institutes a specialist in the key infrastructure issues of the future. In the field of high-performance image processing AIT has a recognized position on the international technological and scientific level. More than 100 experts conduct research in close collaboration with leading companies in industry and science.

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Tel.: +49 8505 916 060, info@alfavisision.de, www.alfavisision.de

Producer

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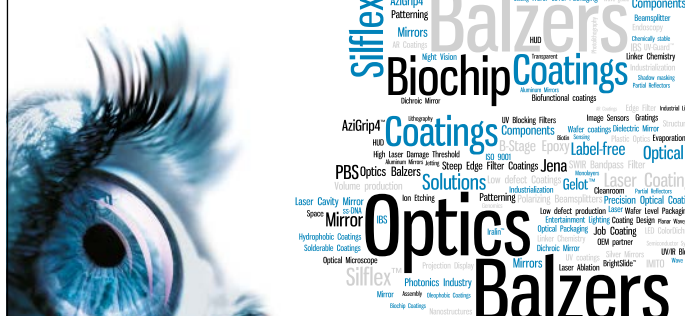
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Integrator

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Solution Provider

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Tel.: +49 38294 166 760, office@diaspective-vision.com, www.diaspective-vision.com

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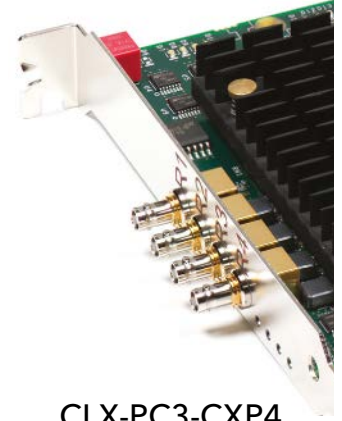
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Integrator, Solution Provider

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Producer

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Tel.: +49 381 490 98 34, info@hasotec.com, www.hasotec.com

Research Facility

The strategic concept of the HCI is built on the fact that basic problems in image processing are largely application-independent. The approximately 80 scientists working in the HCI conduct basic research with the aim of providing cutting-edge solutions to basic image analysis problems for applications in industry and sciences. The HCI is part of the institutional strategy of the University of Heidelberg within the Excellence Initiative.

HCI at IWR Heidelberg University
Berliner Str. 43, Mathematik B, 69120 Heidelberg, Germany,
hci@iwr.uni-heidelberg.de, https://hciweb.iwr.uni-heidelberg.de/

Producer, Solution Provider

HD Vision Systems supports manufacturing companies in all questions of machine vision. With our unique light field based technology, we offer our customers a fast and easy access to automation: The light field allows to detect shiny surfaces or fiber composite materials – even under regular ambient light. The flexible system is able to handle projects with very small quantities and adapt them as required. Applications include 3D scanning, object detection, bin picking and quality inspection.

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Machine Builder/OEM

Heliotis AG · D4 Platz 4, 6039 Root Längenbold, Switzerland,
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Solution Provider

Helms Technologie GmbH · An der Strusbek 8a, 22926 Ahrensburg, Germany,
Tel.: +49 4102 222 50, info@helms-technologie.de, www.helms-technologie.de

Producer

Helmut Hund GmbH · Wilhelm-Will-Str. 7, 35580 Wetzlar, Germany,
Tel.: +49 6441 200 40, info@hund.de, www.hund.de

Producer, Research Facility

Hema Electronic GmbH · Roentgenstr. 31, 73431 Aalen, Germany,
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Machine Builder/OEM

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Producer

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Research Facility

The department of optical technologies and machine vision (Optotechnik und Bildverarbeitung) is part of the faculty of mathematics and natural sciences at Darmstadt University of Applied Sciences (Hochschule Darmstadt). The joint experience of 12 professors from various fields of optics, laser technology, image processing and optical metrology provides the background for profound work on cutting-edge research projects and an outstanding commitment to a modern study program, integrating optical technologies and machine vision.

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Producer

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Integrator

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Producer, Solution Provider

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Integrator

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Integrator, Solution Provider

ICW [Industrie-elektronik] · Engelschalkstr. 32, 86316 Friedberg, Germany,
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Producer

IDS Imaging Development Systems GmbH
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Distributor, Integrator, Solution Provider

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Producer, Solution Provider

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Tel.: +49 201 242 20, info@ifm.com, www.ifm.com

Producer

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Producer

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Integrator

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Distributor, Producer, Solution Provider

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Producer

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Solution Provider

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Producer

Infinity Photo-Optical GmbH · Hans-Böckler-Str. 10a, 37079 Göttingen, Germany,
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Media

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Solution Provider

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Integrator, Solution Provider

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Producer

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Distributor, Producer, Solution Provider

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Solution Provider

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automotive, general industries and food & packaging markets and offers surface inspection solutions for the glass, display glass, solar industry, plastics, films, nonwovens, print, printed electronics, paper, specialty paper and metal markets.

Isra Vision AG · Industriestr. 14, 64297 Darmstadt, Germany,
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Integrator

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Integrator

J-Vision GmbH · Marktplatz 3, 66687 Wadern, Germany, Tel.: +49 6871 920 13 81,
info@jj-vision.de, www.jj-vision.de

Producer

JAI is a global manufacturer of digital cameras for machine vision, traffic imaging, global security, medical imaging and scientific research. Besides a broad range of leading-edge 1-CMOS progressive area scan and line scan cameras, JAI is a leading provider of multi-imager cameras incorporating advanced prism-block tech-

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JAI - Germany · Industriering 7, 63868 Grosswallstadt, Germany
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Integrator, Machine Builder/OEM, Producer, Solution Provider

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Producer

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Producer

Jos. Schneider Optische Werke GmbH is a worldwide recognised manufacturer of high-performance lenses and filters as well as optical and mechanical components for industrial applications. With excellent optical and mechanical properties, Schneider-Kreuznach products suit perfectly to industrial

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Integrator, Solution Provider

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Producer

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Producer

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Producer

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Producer

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Media

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Producer

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Distributor, Producer

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Distributor, Producer

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Producer

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Producer

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Producer

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Producer

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Producer

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Producer

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Distributor, Producer

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Producer

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Producer

Lucid Vision Labs, Inc. designs and manufactures innovative machine vision cameras and components that utilize the latest technologies to deliver exceptional value to customers. The compact, high-performance GigE Vision cameras are suited for a wide

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Lucid Vision Labs GmbH · Renntalstr. 14, 74360 Ilsfeld, Germany, Tel.: +49 7062 976 76 12, sales.emea@thinklucid.com, https://thinklucid.com/

Producer

M-u-t AG · Am Marienhof 2, 22880 Wedel, Germany, Tel.: +49 4103 930 80, info@mut-group.com, www.mut-group.com

Solution Provider

Mabri.Vision GmbH · Dennewartstr. 25-27, 52068 Aachen, Germany, Tel.: +49 2415 652 79 30, info@mabri.vision, www.mabri.vision

Distributor

MachineVision-Shop GmbH · Angermühlstr. 19, 82544 Egling, Germany, Tel.: +49 8176 219 30 85, sales@mv-shop.com, www.mv-shop.com

Consultant, Integrator, Research Facility, Solution Provider

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Producer

Matrix Vision GmbH · Talstr. 16, 71570 Oppenweiler, Germany, Tel.: +49 7191 943 20, info@matrix-vision.de, www.matrix-vision.com

Distributor

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Tel.: +49 711 997 99 63, info@maxxvision.com, www.maxxvision.com

Producer



MBJ Imaging GmbH specializes in the development, manufacturing and sales of high quality innovative LED lighting and controllers for the machine vision industry.

The wide variety of LED lighting and the corresponding accessories like mounting frames, filter holder, filters and cables allow a simple and cost-saving integration into any fully automatic inspection system. All MBJ standard lights have the controller integrated. Four operation modes are available: steady light, dimmed light, triggered light and flash light.



MBJ Imaging GmbH
Neuer Höltingbaum 15
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Germany
Tel.: +49 40 226 16 23 30
sales@mbj-imaging.com
www.mbj-imaging.com

Machine Builder/OEM, Producer

The Product Inspection Division of Mettler Toledo is a leader in the field of automated inspection technology. The Division incorporates the Safeline Metal Detection and X-ray Inspection, Garvens and Hi-Speed Checkweigh-

ing and the CI Vision and PCE Track & Trace brands. The solutions provided by the business increase process efficiency for manufacturers while supporting compliance with industry standards and regulations.

Mettler Toledo Product Inspection

Kampstr. 7, 31180 Giesen, Germany, Tel.: +49 5121 933 222, pid@mt.com,
www.mt.com/de/de/home/products/product-inspection_1.html?cmp=als_pi

Distributor

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Machine Builder/OEM, Producer

Micro-Epsilon Messtechnik GmbH & Co. KG · Königbacher Str. 15, 94496 Ortenburg, Germany, Tel.: +49 8542 168 0, info@micro-epsilon.com,
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Producer

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Distributor, Producer

Mikrotron GmbH provides a full range of high-end imaging solutions for challenging applications in industry, engineering, science and sports. The company develops, produces, and markets digital high-speed cameras, image processing components, and high-speed recording systems

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Producer

Mitutoyo Messgeräte GmbH · Borsigstr. 8-10, 41469 Neuss, Germany,
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Producer

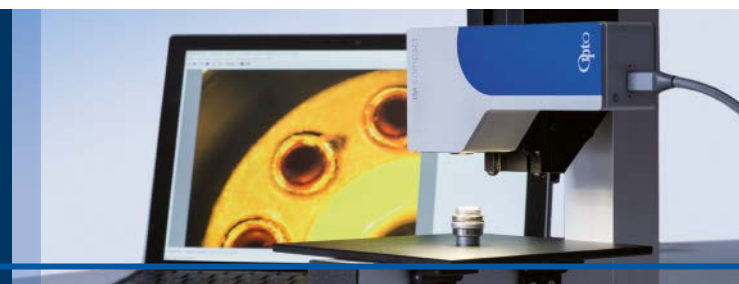
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Consultant, Integrator, Machine Builder/OEM, Solution Provider

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lar, software by MVTEC enables new automation solutions in settings of the Industrial Internet of Things. MVTEC is the developer and vendor of the general purpose machine vision software products Halcon and Merlic.

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Integrator, Producer, Solution Provider

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Producer

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Solution Provider

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Producer

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Distributor, Producer

NET New Electronic Technology has more than 15 years of experience in the development, production and distribution of innovative camera technology. Its in-depth application knowledge enables NET to come up with creative concepts and solutions for the industrial and medical sectors. Camera tech-

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Producer, Solution Provider

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Machine Builder/OEM

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Producer

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Distributor

With a broad spectrum, which includes all components necessary for image processing, the Notavis GmbH addresses customers with its own image processing department, like e.g. large engineering companies (OEMs),

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Solution Provider

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Integrator

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Producer

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Integrator

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Producer

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Solution Provider

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Producer

OptoPolymer · Königsteinstr. 12, 80807 München, Germany, Tel.: +49 89 356 571 83, info@optopolymer.de, www.optopolymer.de

Machine Builder/OEM

OptoSurf GmbH · Nobelstr. 9-13, 76275 Ettlingen, Germany, Tel.: +49 7243 766 013, info@optosurf.com, www.optosurf.com

Producer

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Producer

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Producer

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Producer

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Producer, Solution Provider

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Producer

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Consultant, Integrator

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Machine Builder/OEM

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Tel.: +49 7461 928 60, sales@leibinger-group.com, www.leibinger-group.com

Producer

In 1987, PCO AG was founded with the objective to develop and to produce specialized fast and sensitive video camera systems, mainly for scientific applications. Meanwhile the product range of PCO cameras covers digital camera systems with high dynamic range, high resolution, high speed and low noise, which are sold in the scientific and industrial market all over the world. Currently PCO is one of the leading manufacturers of scientific cameras. The actual wide range of specialized camera systems is the result of technical challenge and product specific know-how.

PCO AG · Donaupark 11, 93309 Kelheim, Germany,
Tel.: +49 9441 200 50, info@pco.de, www.pco.de

Consultant, Solution Provider, Other

Perception Park GmbH · Wartingergasse 42, 8010 Graz, Austria,
Tel.: +43 316 931 269 100, info@perception-park.com, www.perception-park.com

Solution Provider

Pharmacontrol Electronic GmbH · Harzstr. 1, 64646 Heppenheim, Germany,
Tel.: +49 6252 673 60, mtpce.info@mt.com, www.mt.com/pce

Producer

Photonfocus AG · Bahnhofplatz 10, 8853 Lachen, Switzerland,
Tel.: +41 55 451 00 00, sales@photonfocus.com, www.photonfocus.com

Producer, Solution Provider

Phytec Messtechnik GmbH · Robert-Koch-Str. 39, 55129 Mainz, Germany,
Tel.: +49 6131 922 10, info@phytec.de, www.phytec.de

Integrator, Solution Provider

Pi4_robotics GmbH · Gustav-Meyer-Allee 25, 13355 Berlin, Germany,
Tel.: +49 30 700 969 40, sales@pi4.de, www.pi4.de

Producer

Piezosystem Jena GmbH · Stockholmer Str. 12, 7747 Jena, Germany,
Tel.: +49 3641 668 80, info@piezोजना.com, www.piezोजना.com

Producer

Planistar Lichttechnik GmbH · Wiesenweg 4, 97267 Himmelstadt, Germany,
Tel.: +49 9364 806 00, info@planistar.de, www.planistar.de

Consultant, Distributor, Producer, Solution Provider

Plasmo Industrietechnik GmbH · Dresdner Str. 81-85, 1200 Vienna, Austria,
Tel.: +43 1 236 260 70, sales@plasmo.eu, www.plasmo.eu

Producer

POG Präzisionsoptik Gera · Gewerbepark Keplerstr. 35, 7549 Gera, Germany,
Tel.: +49 365 773 930, info@pog.eu, www.pog.eu

Distributor

Polytec GmbH · Polytec-Platz 1-7, 76337 Waldbronn, Germany
Tel.: +49 7243 604 18 00, bv@polytec.de, www.polytec.com/bv

Producer

Präzisions Glas & Optik GmbH · Im Langen Busch 14, 58640 Iserlohn, Germany,
Tel.: +49 2371 776 790, info@pgo-online.com, www.pgo-online.com

Producer, Solution Provider

Precitec is the specialist for laser material processing and optical measuring technology. What does this mean? The company is not just a system and component supplier, but also a professional partner for smooth processing. It will develop sound and well-defined solutions together with the customer that match their needs and objectives.

Precitec Vision GmbH & Co. KG · Rotfarb 4, 8413 Neftenbach, Switzerland,
info@precitec.ch, www.precitec.ch

Producer

Pro Design Electronic GmbH · Albert-Mayer-Str. 14-16, 83052 Bruckmühl,
Germany, Tel.: +49 171 303 47 52, frank.eckardt@prodesign-europe.com,
www.prodesign-europe.com

Producer, Research Facility, Solution Provider

Profactor GmbH · Am Stadtgut A2, 4407 Steyr, Austria,
Tel.: +43 7252 885 0, maria.fuehrlinger@profactor.at, www.profactor.at

Producer, Solution Provider

ProxiVision GmbH · Stubenwald-Allee 16, 64625 Bensheim, Germany,
Tel.: +49 6251 170 30, info@proxivision.de, www.proxivision.de

Producer

Pyramid Computer GmbH · Bötzingenstr. 60, 79111 Freiburg, Germany,
Tel.: +49 761 451 47 92, sales@pyramid.de, www.pyramid.de

Producer

Qioptiq is part of Excelitas Technologies Corp., a global technology leader focused on delivering innovative, high-performance, market-driven photonic solutions to meet the lighting, detection and optical technology needs of global customers. From biomedical technology to research laboratory, safety and security, consumer products, semiconductor, energy and environment, industrial sensing & imaging, defense and aerospace we are committed to enabling our customers' success in their end-markets. With approximately 6,500 employees in North America, Europe and Asia, Excelitas and Qioptiq serving customers across the world.

Qioptiq Photonics GmbH & Co. KG · Königsallee 23, 37081 Göttingen, Germany,
Tel.: +49 551 693 50, sales@qioptiq.de, www.qioptiq.de

Camera Enclosures
Mounting Solutions
Accessories



www.autoVimation.com

Solution Provider

Quiss AG · Lilienthalstr. 5, 82178 Puchheim, Germany,
Tel.: +49 89 894 590, info@quiss.com, www.quiss.com

Distributor

Rauscher GmbH is a leading distributor for all imaging components, including software, area- and linescan cameras, frame grabbers, image-processing boards, smart cameras, embedded systems, optics, lighting and accessories. Rauscher GmbH combines distribution with high engineering competence. This enables all customers to efficiently develop and market their vision system.

Rauscher GmbH · Johann-G.-Gutenberg-Str. 20, 82140 Olching, Germany,
Tel.: +49 8142 448 410, info@rauscher.de, www.rauscher.de

Integrator, Machine Builder/OEM, Solution Provider

RBC Fördertechnik GmbH · Dieselstr. 5, 65520 Bad Camberg, Germany,
Tel.: +49 6434 207 910, info@rbc-robotics.de, www.rbc-robotics.de

Producer

Rheintacho Messtechnik GmbH · Waltershofener Str. 1, 79111 Freiburg, Germany,
Tel.: +49 761 451 30, info@rheintacho.de, www.rheintacho.com

Producer

Ricoh International B.V. - German Branch
Oberrather Str. 6, 40472 Düsseldorf, Germany, Tel.: +49 211 654 645 00,
iosd@ricoh-europe.com, www.ricoh-iosd.eu

Integrator

Rohwedder AG · Kesselbachstr. 1, 88697 Bermatingen, Germany,
Tel.: +49 7544 502 100, michael.stoecker@rohwedder.com, www.rohwedder.com

Distributor

Rubroeder GmbH Factory Automation · Theodor-Neizert-Str. 1, 56170 Bendorf, Germany,
Tel.: +49 2622 943 730, info@rubroeder.de, www.rubroeder.de

Solution Provider

SAC Sirius Advanced Cybernetics GmbH · An der RaumFabrik 33b,
76227 Karlsruhe, Germany, Tel.: +49 721 605 430 00,
info@sac-vision.de, www.sac-vision.de

Distributor

Schaefer Technologie GmbH · Robert-Bosch-Str 31, 63225 Langen, Germany,
Tel.: +49 6103 300 980, info@schaefer-tec.com, www.schaefer-tec.com

Producer

Schäfter + Kirchhoff GmbH · Kieler Str. 212, 22525 Hamburg, Germany,
Tel.: +49 40 853 99 70, info@sukhamburg.de, www.sukhamburg.de

Distributor, Integrator, Solution Provider

Schoenherr Elektronik GmbH · Tuschschererstr. 6, 9116 Chemnitz, Germany,
Tel.: +49 3726 790 50, info@schoenherr-elektronik.com,
www.schoenherr-elektronik.com

Producer, Solution Provider

Schölly Micro Optics GmbH · An der Amtmannsmühle 11, 35444 Biebertal, Germany,
Tel.: +49 6409 661 100, info@schoelly-microoptics.de,
www.schoelly-microoptics.de

Producer

Schott AG Lighting and Imaging · Otto-Schott-Str. 2, 55127 Mainz, Germany,
Tel.: +49 6131 667 752, lightingimaging@schott.com,
www.schott.com/lightingimaging

Machine Builder/OEM, Solution Provider

Seidenader Vision GmbH · Lilienthalstr. 8, 85570 Markt Schwaben, Germany,
Tel.: +49 8121 802 0, info@seidenader.de, www.seidenader.de

Producer

Seiwa Optical Europe GmbH · Schubertstr. 14, 60325 Frankfurt/Main, Germany,
Tel.: +49 69 740 878 47, info@seiwaoptical.com, www.seiwaoptical.com

Producer

SensoPart Industriesensorik GmbH · Nägelseestr. 16, 79288 Gottenheim, Germany,
Tel.: +49 7665 947 690, info@sensopart.de, www.sensopart.de

Association, Strategische Partnerschaft

Sensorik e.V./Cluster Sensorik
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info@sensorik-bayern.de, www.sensorik-bayern.de

Producer

Sensor Technologies is a Japanese industrial camera manufacturer with more than 27 years of experience. The company specializes in the development of advanced digital and OEM cameras for machine vision, industrial, medical, microscope, military and traffic applications. Sentech's worldwide team consists of over 60 dedicated individuals represented in four countries.

Sensor Technologies Europe, LLC · Carl-Zeiss-Str. 37, 63322 Roedermark, Germany, www.sentecheurope.com

Producer

Sensor to Image GmbH · Lechtorstr. 20, 86956 Schongau, Germany,
Tel.: +49 8861 236 90, email@sensor-to-image.de, www.sensor-to-image.de

Integrator, Solution Provider

Senswork GmbH · Gewerbepark Lindach D 3, 84489 Burghausen, Germany,
Tel.: +49 8677 409 95 81, info@senswork.com, www.senswork.com

Integrator, Solution Provider

Seritec GmbH · Gottlieb-Keim-Str. 60, 95448 Bayreuth, Germany,
Tel.: +49 921 990 093 30, info@seritec.de, www.seritec.de

Machine Builder/OEM

Sglux GmbH · Richard-Willstätter-Str. 8, 12489 Berlin, Germany,
Tel.: +49 30 530 152 11, welcome@sglux.de, www.sglux.com

Producer

Shape Drive GmbH · Bindingstr. 11, 82131 Stockdorf, Germany,
Tel.: +49 89 454 612 46, info@shape-drive.com, www.shape-drive.com

Producer

Sharp Microelectronics Europe · Sonninstr. 3, 20097 Hamburg, Germany,
Tel.: +49 40 237 60, info.sme@sharp.eu, www.sharpsme.com

Producer

Sick is one of the world leading suppliers of Industrial Sensors and Safety solutions. Sick provides industrial vision cameras for factory and logistics automation. The product line includes Vision Sensors, Smart Cameras, Code readers, Accessories and Cameras for high speed 3D Machine Vision. Target customers are Machine Builders, System Integrators and End Users.

Sick AG · Erwin-Sick-Str. 1, 79183 Waldkirch, Germany, Tel.: +49 7681 202 0,
bildverarbeitung@sick.de, www.sick.com

Producer

Siemens AG Process Industries and Drives
Gleiwitzer Str. 555, 90475 Nürnberg, Germany,
Tel.: +49 911 895 0, simatic-ident.i-ia@siemens.com, www.siemens.de/ident

Solution Provider

Signum Computer GmbH · Lena-Christ-Str. 50, 82152 Planegg-Martinsried, Germany, Tel.: +49 89 547 05 50, sales@signum-vision.de, www.signum-vision.de

Producer

Silicon Software is one of the international technology leaders with innovative product lines for industrial applications in Machine Vision and service provider for customized adaptations. The company produces off-the-shelf products as well as customized OEM

solutions. Hardware products are the series of intelligent image acquisition and processing boards. VisualAplets offers a graphical programming of FPGA processors in frame grabbers and cameras.

Silicon Software GmbH · Konrad-Zuse-Ring 28, 68163 Mannheim, Germany, Tel.: +49 621 789 507 0, info@silicon-software.de, silicon.software

Producer

Sill Optics GmbH & Co. KG · Johann-Höllfritsch-Str. 13, 90530 Wendelstein, Germany, Tel.: +49 9129 902 30, info@silloptics.de, www.silloptics.de

Solution Provider

Simon IBV GmbH · Bayreuther Str. 5b, 95494 Gesees, Germany, Tel.: +49 9201 917 420, info@simon-ibv.de, www.simavis.de

Producer, Solution Provider

Smartray GmbH · BGM-Finsterwalder-Ring 12, 82515 Wolfratshausen, Germany, Tel.: +49 8171 968 34 00, info@smartray.de, www.smartray.de

Integrator, Solution Provider

SmartSurv Vision Systems GmbH · Malmshheimer Str. 7, 71063 Sindelfingen, Germany, Tel.: +49 7031 304 18 00, info@smartsurv.de, www.smartsurv.de

Distributor, Producer

Stemmer Imaging is Europe's largest machine vision technology provider for science and industry. The perfect combination of innovative products, intelligent consulting and extensive service helps our customers solve

their imaging projects with speed and ease. Our experienced specialists are available to you in 19 European countries ensuring easy contact and optimum local consultancy service.

Stemmer Imaging · Gutenbergstr. 9-13, 82178 Puchheim, Germany, Tel.: +49 89 809 020, info@stemmer-imaging.de, www.stemmer-imaging.com

Machine Builder/OEM

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Integrator

Stöhrmann Systemtechnik · Im Erlenwädele 21, 77955 Ettenheim, Germany, Tel.: +49 7822 895 203, info@stoehrmann.de, www.stoehrmann.de

Producer

Stratec Control Systems · Ankerstr. 73, 75203 Königsbach-Stein, Germany, Tel.: +49 7232 400 60, info@bbull.com, www.bbull.com

Consultant

Strategema | Frank Olschewski Consulting
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Association

Since 2006, Strategische Partnerschaft Sensorik has bundled the existing sensor technology expertise on behalf of the Free State of Bavaria in order to sustainably strengthen the innovative power and future viability of companies and institutions. As a regional net-

work for the industry, we provide operational and strategic support. Our network is made up of over 80 highly innovative companies and institutions. Experts from science, research and development complement this high-tech expertise.

Strategische Partnerschaft Sensorik e.V./Cluster Sensorik
Franz-Mayer-Str. 1, 93053 Regensburg, Germany, Tel.: +49 941 630 916 13, info@sensorik-bayern.de, www.sensorik-bayern.de

Producer

Streppel Glasfaser-Optik oHG · Döllersweg 3, 42929 Wermelskirchen, Germany, Tel.: +49 2196 947 060, info@streppel.de, www.streppel.de

Producer

STZ Qualitätsicherung & Bildverarbeitung · Werner-von-Siemens-Str. 12, 98693 Ilmenau, Germany, Tel.: +49 3677 208 066, stz@stz-ilmenau.de, www.stz-ilmenau.de

Producer

As a producer of cameras for industrial machine vision, SVS-Vistek GmbH has been synonymous with innovation and precision for over 30 years. The SVCam-series cameras are used wherever a precise view is required for materials handling or assembly technology, logistics, traffic monitoring or

quality assurance. Known all over the world for its industrial cameras, the mid-size company develops and produces exclusively in Seefeld near Munich, Germany. It provides specially customized solutions for system integrators and OEM customers.

SVS-Vistek GmbH · Mühlbachstr. 20, 82229 Seefeld, Germany, Tel.: +49 8152 998 50, info@svs-vistek.com, www.svs-vistek.com

Producer

SynView GmbH · Hessenring 83, 61348 Bad Homburg, Germany, Tel.: +49 6172 388 000, info@synview.com, www.synview.com

Producer

We are proud to announce the new super compact M112FM series: The lenses have been developed for cameras with large 1/1.2" imagers, like the IMX174/IMX249. They deliver cutting edge optical performance with no vi-

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Tamron Europe GmbH · Robert Bosch Str. 9, 50769 Köln, Germany, Tel.: +49 221 970 32 50, cctv@tamron.de, www.tamron.eu/de/industrial-optics/

Producer

Teledyne Dalsa · Lise-Meitner-Str. 7, 82152 Krailling, Germany, Tel.: +49 89 895 457 30, sales.europe@teledynedalsa.com, www.teledynedalsa.com/mv

Solution Provider

Tema · Wilhelmstr. 41-43, 58332 Schwelm, Germany, Tel.: +49 2336 929 850, info@temavisio.com, www.temavisio.com

Producer

The Imaging Source Europe GmbH · Sommerstr. 36, 28215 Bremen, Germany, Tel.: +49 421 335 910, info@theimagingsource.com, www.theimagingsource.com

Producer, Solution Provider

Thermosensorik GmbH · Am Weichselgarten 7, 91058 Erlangen, Germany, Tel.: +49 9131 691 400, info@thermosensorik.de, www.thermosensorik.de

Producer

Tichawa Vision GmbH · Burgwallstr. 14, 86316 Friedberg, Germany, Tel.: +49 821 455 55 30, sales@tichawa.de, www.tichawa.de

Producer

TriDiCam GmbH · Finkenstr. 61, 47057 Duisburg, Germany,
Tel.: +49 204 378 329 37, jochen.noell@tridicam.de, www.tridicam.de

Machine Builder/OEM

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Tel.: +49 4103 180 060, sales@trioptics.com, www.trioptics.com

Integrator

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Producer, Solution Provider

Unique Vision GmbH · Kleine Bahnstr. 8, 22525 Hamburg, Germany,
Tel.: +49 40 278 648 50, info@unique-vision.net, www.unique-vision.net

University

Apart from industry driven research projects in Photonics and Photonics-related precision measurement and calibration services, University of Applied Sciences of the Grisons Chur – FHGR offers both a BSc in Photonics as well as a Masters of Advanced Studies (MAS) in Photonics, which are unique in Switzerland.

University of Applied Sciences of the Grisons Chur – FHGR
Pulvermühlestr. 57, 7000 Chur, Switzerland,
Tel.: +41 81 286 24 24, hochschule@fhgr.ch, www.fhgr.ch/en

Association

The VDMA Machine Vision Group forms part of the Robotics+Automation Association within the VDMA Engineering Federation. VDMA Machine Vision currently more than 100 members. Our members are manufacturers and suppliers of machine vision technology and cover customer-specific solutions, system integration, standard systems as well as components.

VDMA Machine Vision · Lyoner Str. 18, 60528 Frankfurt / Main, Germany,
vision@vdma.org, http://ibv.vdma.org/en_GB/

Producer

VDS Vosskühler GmbH · Weiße Breite 7, 49084 Osnabrück, Germany,
Tel.: +49 541 800 840, vds@vdsvoosk.de, www.vdsvoosk.de

Producer

Vialux GmbH · Am Erlenwald 10, 9128 Chemnitz, Germany,
Tel.: +49 371 334 24 70, info@vialux.de, www.vialux.de

Distributor

Videor E. Hartig GmbH · Carl-Zeiss-Str. 8, 63322 Rödermark, Germany,
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Producer

ViDi revolutionizes the industry by commercializing the first Deep Learning based Image Analysis solution dedicated to the Machine Vision market. ViDi Suite is the first ready-to-use Deep Learning software dedicated to industrial Image Analysis. ViDi Suite is a field-tested, optimized and trustable software solution based on state-of-the-art set of algorithm in Machine Learning. It tackles otherwise impossible to program both functional and aesthetics anomalies inspection & classification.

ViDi · Z.I. du Vivier 22, 1690 Villaz-St-Pierre, Switzerland,
Tel.: +41 26 653 72 30, info@vidi-systems.com, www.vidi-systems.com

Consultant, Integrator, Machine Builder/OEM, Producer, Solution Provider, Other

VisiConsult X-ray Systems & Solutions GmbH
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Solution Provider

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Tel.: +49 751 560 130, info@visicontrol.com, www.visicontrol.com

Machine Builder/OEM, Solution Provider

Visimation GmbH · Arbuchtalstr. 20, 72800 Eningen, Germany,
Tel.: +49 7121 304 08 00, post@visimation.de, www.visimation.de

Producer



Vision & Control has been developing, manufacturing and marketing a coordinated portfolio of modular machine vision systems for more than 30 years. The company's product development expertise, together with many years of customer support and service experience, gives Vision & Control a unique pool of machine vision expertise, including R&D, production and training.

- 100% quality control
- performance enhancement in production
- increased machine control process reliability and
- better energy efficiency

Our range of services includes consultancy provided by experts, which specifically addresses your needs; professional analysis of your particular task, feasibility studies in the applications lab and training. Machine vision systems supplied by Vision & Control are the ideal choice for monitoring, quality control, verification and automation applications in all types of manufacturing and assembly operations.



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Media

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www.vision-communications.eu

Producer

Vision Components GmbH · Ottostr. 2, 76275 Ettlingen, Germany,
Tel.: +49 7243 216 70, info@vision-components.com, www.vision-components.com

Producer

Vision Engineering is a global leading-edge manufacturer of unique ergonomic stereo microscopes and non-contact measuring systems. Since its formation in 1958, Vision Engineering has become one of the world's most innovative and dynamic microscope manufacturers, with a global distribution network. The product range includes solutions for almost every inspection and measurement application. Choose unparalleled clarity and precision. Innovative and superior ergonomic designs lead to performance and productivity gains. Quality is the goal! For us and our customers as well. That's the reason why we present to our customer worldwide successful products. The eyepiece-less technology which is implemented in our systems allows a nearly fatigue-free operation with the microscope. More comfort is not possible.



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Anton-Pendele-Str. 3
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Fax: +49 8141 401 67 55
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Consultant

Vision Markets · Sarasatestr. 32, 81247 München, Germany,
Tel.: +49 89 215 536 65, contact@markets.vision, www.markets.vision

Solution Provider

Vision Tools Bildanalyse Systeme GmbH · Goethestr. 63-65, 68753 Waghäusel, Germany, Tel.: +49 7254 935 10, info@vision-tools.com, www.vision-tools.com

Consultant

Vision Ventures is an independent, internationally operating boutique M&A advisory that focuses on SMEs active in machine vision and optical technologies. Our services cover strategy consulting, identification and improvement of value drivers – especially in preparation of company

transactions –, market-based enterprise valuation and the end-to-end management of sell-side and buy-side M&A. For investors we also provide expert opinions on enterprise value, business plan and market environment.

Vision Ventures GmbH & Co. KG · P.O. Box 1148, 64629 Heppenheim, Germany, Germany, Tel.: +49 178 175 59 72, www.vision-ventures.eu

Producer

Visiosens GmbH · Hannah-Vogt-Str. 1, 37085 Göttingen, Germany,
Tel.: +49 551 305 410 80, info@visiosens.de, www.visiosens.de

Integrator, Solution Provider

Visotect GmbH · Heubergstr. 19, 70806 Kornwestheim, Germany,
Tel.: +49 7154 800 88 61, info@visotect.de, www.visotect.de

Distributor

Vistas GmbH · Freisinger Str. 13, 85737 Ismaning, Germany,
Tel.: +49 89 929 280 90, info@vistas-gmbh.de, www.vistas-gmbh.de

Producer, Solution Provider

Vitronic Dr.-Ing. Stein Bildverarbeitungssysteme GmbH
Hasengartenstr. 14, 65189 Wiesbaden, Germany,
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Distributor, Integrator, Producer, Solution Provider

Vizaar AG · Hechinger Str. 152, 72461 Albstadt, Germany,
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GERMANY / AUSTRIA / SWITZERLAND

Distributor

VKT Video Kommunikation GmbH, Technisches Fernsehen
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Solution Provider

VMT Vision Machine Technic Bildverarbeitungssysteme GmbH
Mallaustr. 50-56, 68219 Mannheim, Germany,
Tel.: +49 621 842 500, info@vmt-gmbh.com, www.vmt-gmbh.com

Producer

Volpi AG · Wiesenstr. 33, 8952 Schlieren, Switzerland,
Tel.: +41 4473 243 43, mail@volpi.ch, www.volpi.ch

Solution Provider

Volume Graphics GmbH · Speyerer Str. 4 - 6, 69115 Heidelberg, Germany,
Tel.: +49 6221 739 20 60, info@volumegraphics.com, www.volumegraphics.com

Producer

VRmagic Imaging GmbH · Turley-Str. 20, 68167 Mannheim, Germany,
Tel.: +49 621 400 416 20, info.imaging@vrmagic.com, www.vrmagic-imaging.com

Integrator, Solution Provider

Weber Systemtechnik · Hans-Sachs-Str. 10, 35576 Wetzlar, Germany,
Tel.: +49 6441 378 040, info@wesys.de, www.wesys.de

Distributor, Integrator, Solution Provider

Weiss Imaging and Solutions GmbH · Kohlstattstr. 3, 85235 Odelzhausen,
Germany, Tel.: +49 8131 379 80 68, info@weiss-imaging.de,
www.weiss-imaging.de

Producer

Wenglor Sensoric GmbH · Wenglor Str. 3, 88069 Tettngang, Germany,
Tel.: +49 7542 539 90, info@wenglor.com, www.wenglor.com

Machine Builder/OEM, Solution Provider

Wenzel Group GmbH & Co. KG · Werner-Wenzel-Str., 97859 Wiesthal, Germany,
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Producer

Werth Messtechnik GmbH · Siemensstr. 19, 35394 Giessen, Germany,
Tel.: +49 641 793 80, mail@werth.de, www.werth.de

Solution Provider

Wickon Hightech s.r.o. · Mezi Zahradami 470, 250 64 Hovorčovice, Czech Republic,
Tel.: +420 602 424 153, info@wickon.com, www.wickon.com

Producer

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Tel.: +49 371 404 606 0, wir@wir-electronic.de, www.wir-electronic.de

Solution Provider

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Tel.: +49 7237 486 900, info@wolfsysteme.de, www.wolfsysteme.de

Producer

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Tel.: +41 44 842 24 00, info-germany@xrite.com, www.xrite.com

Producer

Xapt GmbH · Neidenburger Str. 10, 45897 Gelsenkirchen, Germany,
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Producer

Ximea designs and produces leading-edge, high-performance cameras with the lowest power consumption and the smallest footprint, as well as highly optimized camera and imaging solutions for volume OEM applications. Our camera designs are based on powerful, flexible technology platforms that include an application programming interface (API) for many common Vision libraries as well as compliance with industry standards like USB3 Vision. xiAPI supports Windows, Linux and OS X operating systems.

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Machine Builder/OEM, Solution Provider



The seamless switch from DR to CT within a test sequence provides utmost inspection accuracy and efficiency. Whether manual, supervised or full-automatic inspection with automated defect recognition (ADR) and evaluation, the comprehensive data sets obtained deliver valuable information about the production processes offering the opportunity to directly correct and improve. The result is increased product quality and yield.

Xylon International designs and produces radioscopic and CT inspection systems for a wide variety of applications and fields such as aviation & aerospace, automotive, and the electronics industry. Our customers are among the largest producers that place their confidence in our quality worldwide. Compared to two-dimensional digital radiography, computed tomography provides three-dimensional insights into inspection items, thus enabling highly detailed analyses and precise measurements of inner structures.

YXLON

Yxlon International GmbH
Essener Bogen 15
22419 Hamburg
Germany
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Fax: +49 40 527 291 70
yxlon@hbg.yxlon.com
www.yxlon.com

Producer

Z-Laser is known as a reliable partner for the machine vision industry with extensive knowledge of more than 30 years in laser production.

Our new ZX lasers are based on a fully automated production process that guarantees highest levels of precision and reproducibility. Numerous

optical configurations, different module dimensions, and the stainless-steel housing (IP67) are key to a smooth integration in any machine vision system.

The Z-Fiber series is the high-end choice wherever an exceptional beam performance (micro lines) for high-resolution measurements is required.

Z-Laser Optoelektronik GmbH · Merzhauserstr. 134, 79100 Freiburg, Germany
Tel.: +49 761 296 44 44, info@z-laser.de, www.z-laser.com

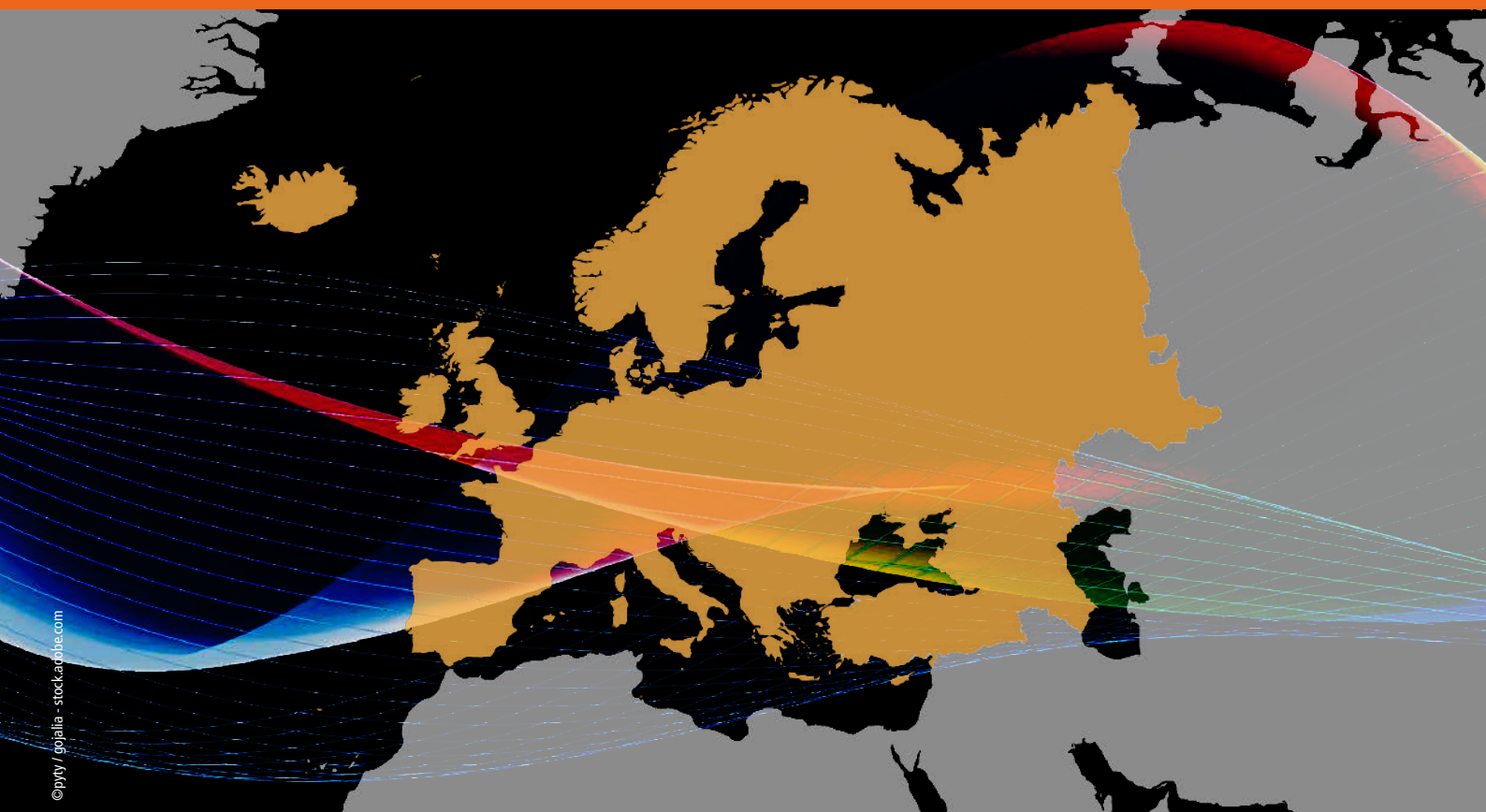
Integrator, Solution Provider

Zertrox GmbH & Co. KG · Martin-Luther-Str. 3, 52062 Aachen, Germany,
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Machine Builder/OEM, Producer, Solution Provider

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Europe



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Integrator, Machine Builder/OEM, Solution Provider

AceLabs s.r.l. · Via Enrico Fermi 30, 20019 Settimo Milanese (MI), Italy, Tel.: +39 024 550 64 88, info@acelabs.it, www.acelabs.it/

Producer

Active Silicon designs and manufactures digital imaging products and technologies. These include embedded vision systems, camera-end interface boards and frame grabbers. Embedded vision systems include customized solutions typically built around the COM Express or Xilinx

Zynq architecture; camera interface boards include 3G-SDI, HDMI, USB 3.0 and IP solutions; CoaXPress and Camera Link frame grabbers are available in PC and embedded form-factors and are supported under Windows, Linux and QNX.

Active Silicon Ltd. · Pinewood Mews, Bond Close, Iver SL0 0NA, United Kingdom, Tel.: +44 1753 650 600, info@activesilicon.com, www.activesilicon.com

Producer

Adaptive Vision · ul. Bojkowska 37A, 44-100 Gliwice, Poland, Tel.: +48 32 461 23 30, info@adaptive-vision.com, www.adaptive-vision.com

Producer

Adimec designs and manufactures high-performance industrial cameras for equipment manufacturers worldwide with demanding machine vision, medical, or military applications whose goal is to be a product leader in their market. The Netherlands-based Holding company has business

offices in Europe, the United States, Japan, and Singapore. Adimec cameras use high quality CCD and CMOS sensor technologies and support a range of interfaces such as CameraLink, GigE, CoaXPress, LVDS, HD-SDI, DVI or custom.

Adimec · Luchthavenweg 91, 5657 EA Eindhoven, Netherlands, Tel.: +31 40 235 39 00, www.adimec.com

Producer

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Solution Provider

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Producer

AnaFocus is specialized in the design and production of custom high-speed, high-performance CMOS camera systems on-chip (camera SoC) and vision systems on-chip (VSoC) for industrial, surveillance, scientific, and medical

applications. Additionally, AnaFocus develops and commercializes a catalogue of standard products consisting of high-performance CMOS single-chip solutions for imaging and vision.

AnaFocus · Avda. Isaac Newton, 4, 7th floor, attic, 41092 Seville, Spain, Tel.: +34 95 408 12 73, rafael.romay@anafocus.com, www.anafocus.com

Producer

Andor Technology · 7 Millenium Way, BT12 7AL Belfast, United Kingdom, Tel.: +44 28 902 371 26, marketing@andor.com, www.andor.com

Solution Provider

Averna · Research Campus 8, 3500 Hasselt, Belgium, Tel.: +32 113 525 48, info-eu@averna.com, www.averna.com

Distributor

By combining innovative technology and customer-oriented service, Baumer ranks among the leading manufacturers of digital cameras and vision sensors. Modern image processing applications face the challenge of successfully completing complex inspection tasks at top speed.

Baumer products are specially developed for demanding applications with high performance and quality requirements. With long-time stable reliability, versatility and easy integration, they convince customers all over the world.

Baumer Italia S.r.l. · Via Resistenza 1, 20090 Assago MI, Italy, Tel.: +39 02 4570 6065, sales.it@baumer.com, www.baumer.com

Producer

Bentham Instruments Ltd. · 2 Boulton Road, RG2 0NH Reading, United Kingdom, Tel.: +44 118 975 13 55, sales@bentham.co.uk, www.bentham.co.uk

Producer

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CCS is the global leader in LED lighting for machine vision applications, pioneering with advances in Illumination and Photonics products and technologies. With over 2,000 standard products and more than 4,000 customized products, CCS has an extensive lighting line-up to ensure the right solution for customer applications, and upholds the highest quality standard in the LED lighting industry.



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info@ccseu.com
www.ccs-grp.com

Producer

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Producer

Crometic · Via Julius-Durst Str. 98, 39042 Bressanone/Brixen, Italy, Tel.: +39 0472 273 730, info@crometic.com, www.crometic.com

Distributor

CSI · 7 Meadowfield Park South, NE43 7QA Stocksfield, United Kingdom, Tel.: +44 1661 842 741, gilscott@csi.co.uk, www.csi-stocksfield.co.uk/

Producer

Our core specialties are Automatic Data Capture and Industrial Automation for the retail, manufacturing, transportation & logistics and healthcare industries.

As a total solutions provider, we've got a long history of creating innovative bar code readers, data collection

mobile computers, sensors, vision systems and laser-marking systems that meet the ever-changing demands of industry. Our dedication to exceeding customer expectations resulted in us having the widest range of high-performance products and solutions in the industry.

Datalogic · Via Candini, 2, 40012 Lippo di Calderara di Reno, Bologna, Italy, Tel.: +39 051 314 70 11, corporate@datalogic.com, www.datalogic.com

Producer, Solution Provider

DataPixel develops and manufactures 3D vision solutions for high speed and high accuracy non-contact measurement for automotive, aerospace, electronics, plastics and glass. DataPixel OptiScan sensors can be integrated on Coordinate Measurement

Machines (CMM), robots and in-line inspection machines. DataPixel 3D pointcloud analysis software products provide the most advanced geometrical feature extraction and CAD comparison functions.

Datapixel S.L. · Carretera de Asúa, 6, 48030 Las Arenas – Getxo, Bizkaia, Spain, Tel.: +34 94 480 51 83, info@datapixel.com, www.datapixel.com/en/

Producer, Solution Provider

DataVision s.r.o. · Ukrajinska 1487/2a, 10100 Prague 10, Czech Republic, Tel.: +42 077 733 11 58, info@datavision.software, www.datavision.software

Distributor, Producer, Solution Provider

Deben UK Ltd. · Brickfields Business Park, IP30 9QS Woolpit, Bury St. Edmunds, Suffolk, United Kingdom, Tel.: +44 1359 244 870, info@deben.co.uk, www.deben.co.uk

Producer

Delta Optical Thin Film develops and manufactures continuously variable filters for applications in spectroscopy, HSI and fluorescence diagnostics, and customised classical optical

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Delta Optical Thin Film A/S · Venlighedsvej 4, 2970 Hørsholm, Denmark Tel.: +45 70 707 146, info@deltaopticalthinfilm.com, www.deltaopticalthinfilm.com

University

The Department of Mechanical and Industrial Engineering (DIMI) of the University of Brescia is one of the oldest Departments of the Area of Engineering. Founded in 1982, together

with the start of the activities of the University as an independent University, is one of the three Departments of the Macroarea of Engineering (the former Faculty of Engineering).

Department of Mechanical and Industrial Engineering (DIMI)
Via Branze 43, 25123 Brescia, Italy, Tel.: +39 0303 715 485, dimi@cert.unibs.it, https://en.unibs.it/departments/mechanical-and-industrial-engineering

Solution Provider

Digital Surf · 6 rue Lavoisier, 5000 Besançon, France, Tel.: +33 3 815 048 00, contact@digitalsurf.fr, www.digitalsurf.com

Distributor, Solution Provider, Integrator

Dimagy is a french company dedicated to vision systems engineering. The expertise relies on the objective analysis of imaging components: It benches, measures, compares cameras, lenses & lightings to get a reliable system for

each application. It provides image quality evaluation material (software, charts, lightings etc.) and consulting services, real-time image processing libraries, and custom development of vision applications.

Dimagy · Fraire Garnière, 04300 Pierrerue, France, Tel.: +33 4 92 74 91 70, contact@dimagy.com

Producer

E2v is designer and manufacturer of high tech electronic components and subsystems including semiconductors, sensors and electronic tubes. E2v supplies high performance CCD and CMOS imaging sensors and cameras for a broad range of demanding applications, operating across the elec-

tro-magnetic spectrum from X-rays, through ultraviolet and visible light to infrared. Delivered to standard or highly customized designs, our sensors serve space, astronomy, dental, scientific, medical and industrial markets.

E2v · Avenue de Rochepleine, BP 123 3852 Saint Egrève Cedex, France, Tel.: +33 4 765 830 00, enquiries@e2v.com, www.e2v.com

Integrator

E3tam · B.Bulv 177d2, 34394 Istanbul, Turkey, Tel.: +90 212 275 22 80, inform@e3tam.com, www.e3tam.com

Producer

Optical Innovation for LED Illumination. Effilux is a worldwide supplier of LED lighting devices for the machine vision market. Effilux offer includes a wide range of standard patented products for line scan inspection, 3D

triangulation, 3D stereovision, accurate optical sorting and others. Additionally, Effilux uses its expertise in optical design to create innovative custom solutions meeting OEM and end users specific requirements.

Effilux · 7 Avenue de l'Atlantique, 91940 Les Ulis, France, Tel.: +33 9 723 817 96, sales@effilux.fr, www.effilux.fr

Association

The European Machine Vision Association EMVA is a non-for-profit and non-commercial association representing the Machine Vision industry in Europe. The association has been founded in 2003 in Barcelona by industry representatives from all over Europe as a

network to promote the development and use of machine vision technology. The EMVA is open for all types of organizations having a stake in machine vision, computer vision, embedded vision or imaging technologies.

EMVA – European Machine Vision Association
Gran Via de Carles III, 84 (3rd floor), 08028 Barcelona, Spain, Tel.: +34 93 180 70 60, info@emva.org, www.emva.org

Producer

Euresys SA · Rue du Bois Saint-Jean 20, 4102 Seraing, Belgium, Tel.: +32 4 367 72 88, sales.europe@euresys.com, www.euresys.com

Distributor

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Solution Provider

FDS Research, d.o.o. · Suhadolcánova 28, 1231 Ljubljana-Črnuče, Slovenia, Tel.: +386 1 589 75 81, info@fdsresearch.si, www.fdsresearch.si

Machine Builder/OEM

Flir Advanced Thermal Solutions · 19, bld Bidault, 77183 Croissy-Beaubourg, France, Tel.: +33 1 413 397 97, info@flir.com, www.flir.com

Producer

Fort SA · 3 rue Lambert ZL de la Gaudre, 91410 Dourdan, France, Tel.: +33 1 608 118 18, info@fort-fr.com, www.fort-fr.com

EUROPE

Producer

Gardasoft Vision was founded in 1999 producing LED lighting controllers for the Machine Vision industry, and is now established as a global leader in the design, manufacture and application of high performance LED

control technology and high intensity LED lighting. Since its inception, Gardasoft has grown strongly through a continuous high level of re-investment in Research and Development.

Gardasoft Vision Limited · Trinity Court Buckingham Business Park Swavesey, CB24 4UQ Cambridge, United Kingdom, Tel.: +44 1954 234 970, vision@gardasoft.com, www.gardasoft.com

Producer

Gas Sensing Solutions (GSS) · 60 Grayshill Road, G68 9HQ Cumbernauld, United Kingdom, Tel.: +44 1236 781 900, info@gassensing.co.uk, www.gassensing.co.uk/

Producer

Global Laser Ltd. · Units 9-10 Roseheyworth Business Park, NP131SP Abertillery, Gwent, United Kingdom, Tel.: +44 1495 212 213, sales@globallasertech.com, www.globallasertech.com

Integrator

Gpixel delivers off-the-shelf and customized CMOS image sensors that meet the demands of scientific, industrial, professional, and medical cameras. At Gpixel a seasoned, multi-disciplinary team of experts is passionate

about pushing the boundaries of image sensing technologies. As a proven designer and supplier of advanced CMOS image sensors, they deliver both off-the-shelf and fully-customized advanced image sensor solutions.

Gpixel NV · Mechelsesteenweg 271, 2018 Antwerp, Belgium, Tel.: +32 330 344 42, info@gpixel.eu, http://en.gpixelinc.com/

Machine Builder/OEM

Graticules Optics Limited · 17-19 Morley Road, TN9 1RN Tonbridge, United Kingdom, Tel.: +44 1732 360 460, sales@graticulesoptics.com, www.graticulesoptics.com

Solution Provider

Hexagon Manufacturing Intelligence · World Headquarters Office, Cedar House, 78 Portsmouth Road, KT11 1AN Cobham, Surrey, United Kingdom, Tel.: +44 20 706 865 80, marketing@hexagonmi.com, www.hexagonmi.com

Producer

Ibsen Photonics is a global leader in developing and manufacturing transmission grating components and grating based OEM spectrometer modules for a wide range of telecom, analytical, sensing, and laser mar-

kets. With more than 25 years of experience in transmission gratings and more than 10 years in high volume OEM spectrometer production (from 175 to 2500 nm), we are perfect fit for all kind of instrument makers.

Ibsen Photonics A/S · Ryttermarken 17, 3520 Farum, Denmark Tel.: +45 4434 700 0, inquiry@ibsen.com, https://ibsen.com/

Solution Provider

Icos Vision Systems · Industriepark Haasrode zone 1 Esperantolaan 8, 3001 Heverlee, Belgium, Tel.: +32 16 398 220, info@icos.be, www.icos.be

Research Facility

Ideko S.Coop develops its activity in eight research lines under the common scope of developing new products and/or services for manufacturing industry. In particular, Inspection

and Measurement research line aims with the development of innovative automated measuring solutions based on Machine Vision and Photonic technologies.

Ideko S.Coop · Arriaga Kalea 2, 20870 Elgoibar, Spain, amendikute@ideko.es, www.ideko.es

Distributor

Founded in 1994, Image S, based in Mariano Comense (CO) Italy, is a reference for system integrators and OEMs in the machine vision industry in Italy for over two decades. The solutions offered find application in different fields: manufacturing, military, medi-

cal and scientific. Image S supplies all the products required to deploy vision systems: industrial cameras, frame grabbers, lenses, LED lights, laser and optical fiber standard and special cables, software and accessories.

Image S S.R.L. · Via Tommaso Grossi, 31, 22066 Mariano Comense (Co), Italy, Tel.: +39 031 746 512, sales@imagesrl.com, www.imagespa.it

Distributor

Infaimon, S.L. · Vergós, 55, 8017 Barcelona, Spain, Tel.: +34 93 252 57 57, infaimon@infaimon.com, www.infaimon.com

Producer, Solution Provider

InRay Solutions Ltd. · 125 Tzarigradsko shosse blvd., block 2, room 510, 1113 Sofia, Bulgaria, Tel.: +359 2 971 57 51, inrays@inrays.com, www.inrays.com

Machine Builder/OEM, Solution Provider

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Machine Builder/OEM

Ivisys · Siktgatan 2, 162 50 Vällingby, Sweden, Tel.: +46 073 464 66 63, vp@ivisys.com, www.ivisys.com

Producer

JAI is a global manufacturer of digital cameras for machine vision, traffic imaging, global security, medical imaging and scientific research. Besides a broad range of leading-edge 1-CMOS progressive area scan and line scan cameras, JAI is a leading provider of multi-imager cameras incorporating advanced prism-block tech-

nology, including 3-CMOS RGB area scan cameras, 2-CMOS multi-spectral cameras plus a complete family of 3-CMOS/4-CMOS line scan cameras. JAI's product program includes cameras for visible, UV, NIR and SWIR imaging with GigE Vision, USB3 Vision, CoaXPress, Camera Link and SFP+ interfaces.

JAI AS - Denmark · Valby Torvegade 17, 1st floor, 2500 Valby, Denmark Tel.: +45 4457 8888, camerasales.emea@jai.com, www.jai.com

Integrator, Solution Provider

JasVisio - Vision Artificial · Olivera, 3, 25286 Olius, Spain, Tel.: +34 973 100 602, info@jasvisio.com, www.jasvisio.com

Solution Provider

JLI Vision A/S · Ellekær 9, 2730 Herlev, Denmark, Tel.: +45 396 608 09, info@jlvision.dk, www.jlvision.dk

Integrator

As a global supplier for quality tools for injection molding of thermosets and thermoplastic, Kolektor provides integral services and expert support in the demanding segments of the automotive industry and the industry of

household appliances. The company specializes in development and production of lines and machines, specialized equipment for production processes, production automation and machine vision.

Kolektor Orodjarna d.o.o. - BU Vision · Cesta v Gorice 34a, 1000 Ljubljana, Slovenia, Tel.: +386 31 525 189, vision@kolektor.com, www.kolektorvision.com

Distributor

Lambda Photometrics Ltd. · Lambda House, Batford Mill, AL5 5BZ Harpenden, United Kingdom, Tel.: +44 1582 764 334, adrian@lambdaphoto.co.uk, www.lambdaphoto.co.uk

Producer

Lambert Instruments · Leonard Springerlaan 19 (5th floor), 9727 KB Groningen, Netherlands, Tel.: +31 50 501 84 61, info@lambertinstruments.com, www.lambertinstruments.com

Producer

Laser Quantum Ltd. · Emery Court, SK4 3GL Stockport, United Kingdom, Tel.: +44 161 975 53 00, info@laserquantum.com, www.laserquantum.com

Producer

LAT elektronik AB · Krossgatan 18, 16250 Vällingby, Sweden, Tel.: +46 87 049 225, info@latab.se, www.latab.se

Producer

LED Microsensor NT · Kurchatova, 10A, 1N, 194223 Saint-Petersburg, Russia, Tel.: +7 812 633 06 35, info@lmsnt.com, www.lmsnt.com

Distributor

Macnica ATD Europe looks back on 30 Years of Trusted Imaging Solutions. Founded in 1990 as ATD Electronique, the company distributes innovative components dedicated to imaging applications for the European market. Its product portfolio includes image sensors (CCD, CMOS, InGaAs, etc.), optics, interface circuits, IPs, imaging processors, cables and M-OLED displays. It also covers development tools and design services enabling fast and efficient realization of high-performance camera systems.

Macnica ATD Europe · 2-6 Rue Emile Pathé - Espace Lumière Bât 2, 78400 Chatou, France, Tel.: +33 1 301 569 70, sales@atdelectronique.com, www.atdelectronique.com

Distributor, Producer

Merz technologies is a Machine vision technology solution and service provider. Since 2013 the company has been involved in providing services in the field of machine vision software development, machine vision system verification and validation, testing machine vision hardware and software and commissioning robotic machine vision systems across global automobile manufactures.

Merz freeform.technologies · ul. Bohaterow Westerplatte 9/303G, 65-034 Zielona Góra, Poland, Tel.: +48 68 320 79 34, info@freeform-technologies.de, www.merz-technologies.com

Producer

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Distributor

Molenaar Optics VOF · P.O. Box 2, 3700 AA Zeist, Netherlands, Tel.: +31 30 695 10 38, info@molenaar-optics.nl, www.molenaar-optics.com

Solution Provider

Neadvance Machine Vision S.A. · Travessa de Gaiao, 5/6 2ªFase, 4705-025 Braga, Portugal, Tel.: +49 3221 322 21 53, sales.de@neadvance.com, www.neadvance.com

Producer

New Imaging Technologies (NIT) · 1-4 Impasse de la noisette, Bat D-1er étage, 91370 Verrières le Buisson, France, Tel.: +33 1 644 788 58, info@new-imaging-technologies.com, www.new-imaging-technologies.com

Producer

NTI · 32 Route de Seichebrières, 45530 Vitry aux Loges, France, Tel.: +33 238 593 051, info@nti-measure.com, www.nti-measure.com

Machine Builder/OEM

Odos imaging is technology focused company manufacturing systems for the capture of high-resolution, time-of-flight, 3D video. Current systems have resolution exceeding 1.3 megapixels. High frame rates and performance in strong ambient light are key features, allowing operation both indoors and outside. GigEVision interfaces enable rapid deployment and simple multi-system connectivity. We offer both complete systems and component technologies for use in a wide variety of demanding applications.

Odos Imaging Ltd. · SMC, The Kings Buildings, EH3 9JF Edinburgh, Lothian, United Kingdom, Tel.: +44 131 650 77 56, info@odos-imaging.com, www.odos-imaging.com

Producer, Solution Provider

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Producer

Omron Microscan Systems Inc. · Lemelerberg 17, 2402 ZN Alphen aan den Rijn, Netherlands, Tel.: +31 172 423 360, emea@microscan.com, www.microscan.com

Producer

Optics Balzers AG · Neugrüt 35, 9496 Balzers, Liechtenstein, Tel.: +423 388 92 00, info@opticsbalzers.com, www.opticsbalzers.com

Producer

Opto Engineering The Telecentric Company has evolved through the years, releasing hundreds of new, diverse products and developing multiple areas of expertise. Today, we can say that we specialize in Optical Imaging Technologies.

Our focus is to build and provide every single component needed to solve imaging applications: starting from our optical DNA we can supply the best combination of tools available on the machine vision market: optics, lighting, industrial cameras, software, and vision units. Thanks to our subsidiaries in USA, Germany and China we can satisfy your needs in terms of technical support and, of course, the local presence of our sales engineers.

Opto Engineering has become the partner of choice in high-end optical applications for many of the major machine vision companies worldwide.

We offer imaging solutions for every business

World leader in telecentric technology and your partner of choice for innovative optical solutions

The best performing components and software for non-contact metrology & vision inspection

IC cameras, IC CMOS sensors, IC CMOS FDS series, PMD sensors

OPTICS

LED series, COE series, HEMES, LEDF series, FOCUS

SOFTWARE

Opto Engineering has lenses to help you improve your productivity

Availability enables directly on your computer & training classes with our vision experts



OPTO ENGINEERING

Opto Engineering Europe Headquarters

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Tel.: +39 0376 699 111
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Integrator, Solution Provider

OptoFidelity Oy · Hemiankati 8 D, 33729 Tampere, Finland, Tel.: +35 840 774 92 59, sales@optofidelity.com, www.optofidelity.com

Consultant, Machine Builder/OEM, Producer, Research Facility, Solution Provider

OptoMotive is specialized in FPGA based high-speed intelligent cameras and architectures for demanding and real-time processing machine vision solutions. OptoMotive assortment of modular high-speed intelligent cameras Cameleon, Camelopard and Velociraptor with its flexible architecture

covers wide array of uses. Expandable FPGA architecture and real-time processing gives the camera a chance to control a process at a very high speed without any additional control units (camera centric systems).

OptoMotive, mechatronics Ltd. · V Murglah 229, 1000 Ljubljana, Slovenia, Tel.: +386 1 429 29 14, info@optomotive.si, www.optomotive.si

Distributor, Integrator, Solution Provider

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EUROPE

Consultant, Solution Provider

Phaer, founded in 2007 and based in Gent, Belgium, represents technology leading vision component manufacturers in the Benelux market. Phaer provides its customers "advance in business with vision." Besides consulting and delivering in-

novative products, Phaer provides "vision system development support services," which are rooted in more than 20 years 'know how' in supporting vision experts with the selection, validation and application of vision components.

Phaer · Kerkstraat 108, 9050 Gentbrugge, Belgium, Tel.: +32 9 261 61 60, info@phaer.be, www.phaer.be

Solution Provider

Phase One Industrial · Roskildevvej 39, 2000 Frederiksberg, Denmark, Tel.: +45 36 460 111, industrial@phaseone.com, industrial.phaseone.com

Producer

Phlox Corporation · Lot n° 8, Rue Louis Berton, Quartier de l'Enfant - ZAC du Quartier, 13100 Aix-en-Provence, France, Tel.: +33 4 429 076 20, christinablanc@mac.com, www.phlox-gc.com

Producer, Solution Provider, Other

Photoneo · Jamnickeho 3, 84105 Bratislava, Slovakia, Tel.: +421 948 766 598, pulisova@photoneo.com, www.photoneo.com

Distributor, Producer

Photonic Products Ltd. · Sparrow Lane, Hatfield Broad Oak CM22 7BA, United Kingdom, Tel.: +44 1279 717 170, sales@photonic-products.com, www.photonic-products.com

Producer

Photron (Europe) Ltd. · The Barn, Bottom Road, West Wycombe, Bucks, HP14 4BS, United Kingdom, Tel.: +44 1494 481 011, ahilton@photron.com, www.photron.com

Distributor

Premier Electronics Ltd. · Old Bishops College/Churchgate, EN8 9XH Waltham Cross, Herts, United Kingdom, Tel.: +44 1992 637 211, sales@premierelect.co.uk, www.premierelect.co.uk/

Solution Provider

Pro-Lite Technology France · 2 Allee Ulysse Gayon, 33650 Martillac, France, Tel.: +33 5 564 924 92, jerome.castay@pro-lite.fr, www.pro-lite.fr

Distributor

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Distributor, Integrator, Producer, Solution Provider

Prophesee is the inventor of the world's most advanced neuromorphic vision systems. The company's patented sensors and AI algorithms introduce a new computer vision par-

adigm based on how the human eye and brain work. Like the human vision, it sees events: essential, actionable information in the scene, not a succession of conventional images.

Prophesee (formerly Chronocam)

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Solution Provider

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Solution Provider

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Solution Provider

Scintacor Ltd. · 8 Roydonbury Industrial Estate, CM19 5BZ Harlow, Essex, United Kingdom, Tel.: +44 1279 641 234, sales@scintacor.com, www.scintacor.com

Solution Provider

SEA Vision · via Folla di Sopra, 21, 27100 Pavia, Italy, Tel.: +39 0382 529 576, czetta@seavision.it, www.seavision.it

Producer, Solution Provider

Sensofar · Parc Audiovisual de Catalunya, Crta. BV-1274 Km 1, 8225 Terrassa, Spain, Tel.: +34 93 700 14 92, info@sensofar.com, www.sensofar.com

Producer

Silios Technologies is specialized in micro-optics. Design and manufacture of VIS/NIR multispectral cameras and custom multispectral filters for any pixelated sensors from any manufacturer. Also diffractive optics for intense

lasers, large grisms and CGH. The applications' fields are: Agriculture, Agro-food, MedTechs, Cosmetics, Lasers, Space & Astronomy, Homeland Security & Defense and Forensics.

Silios Technologies · ZI Peynier-Rousset, Rue Gaston Imbert prolongée, 13790 Peynier, France, Tel.: +33 442 53 89 60, contact@silios.fr, www.silios.com

Producer

SKS Vision Systems OY · P.O. Box 353, 40101 Jyväskylä, Finland, Tel.: +358 20 764 89 60, sales@visionsystems.fi, www.visionsystems.fi

Producer

Smartek Vision · Bana Josipa Jelacica 22c, HR-40000 Cakovec, Croatia, Tel.: +385 40 493 800, info@smartekvision.com, www.smartekvision.com

Producer

Sony Europe Ltd. · The Heights, Brooklands, KT13 0XW Weybridge, Surrey, United Kingdom, Tel.: +33 1 559 035 12, zone@eu.sony.com, www.pro.sony.eu/vision

Producer

SPC Company b.v. · Vimmerik 28, 5253 CB Nieuwkuijk, Netherlands, Tel.: +31 73 513 11 88, sales@spccompany.nl, www.spccompany.nl

Distributor

Special Application Products Ltd. · Unit 5 Manor Farm Business Centre, Ipswich IP9 2TD, United Kingdom, Tel.: +44 1473 327 732, sales@sapltld.co.uk, www.sapltld.co.uk

Distributor

Spectrum Metrology Ltd. · Unit 8 Ireton Ave, LE4 9EU Leicester, United Kingdom, Tel.: +44 116 276 62 62, sales@spectrum-metrology.co.uk, www.spectrum-metrology.co.uk

Distributor

Stemmer Imaging AB · Sandhamnsgatan 63C, 102 52 Stockholm, Sweden, Tel.: +46 85 551 10 00, michael.cohn@stemmer-imaging.se, www.stemmer-imaging.com

Machine Builder/OEM

Stil · 595 rue Pierre Berthier - Domaine Saint Hilaire, 13855 Aix-en-Provence, France, Tel.: +33 4 423 966 51, contact@stilsa.com, www.stilsa.com

Producer

Sundance Multiprocessor Technology Ltd · "Ciltern House", HP5 1PS Waterside, Chesham, United Kingdom, Tel.: +44 1494 793 167, divp@sundance.com, www.sundance.com

Producer

Tattile since 1988 develops and produces sophisticated vision systems for different applications in the three divisions Industrial, Traffic and Railways. Tattile offers ANPR solutions for ITS applications and proposes a comprehensive catalogue of smart cameras, line scan cameras, digital cameras, and

multi-camera vision controllers for high performing applications. Technological partnerships enable customized solutions, made to respond to the needs of industrial OEMs from the most different industry sectors. Tattile is member of the Lakesight Technologies group.

Tattile Srl · Via Gaetano Donizetti 1-3-5, 25030 Mairano (BS), Italy, Tel.: +39 030 970 00, sales@tattile.com, www.tattile.com

Solution Provider

Techway · 19 avenue de Norvège, 91140 Villebon sur Yvette, France, Tel.: +33 1 64 53 37 90, info@techway.fr, http://www.techway.fr

Research Facility

Tecnalia is the largest Research & Innovation company in Spain that was born in January 2011 when eight R&D centers located in the Basque country merged into one single organization. With 1.400 employees, Tecnalia

is organized in seven business units, specialized in vertical markets: ICTs, Energy and Environment, Manufacturing, Construction Industry, Health, Innovation Policies, Technical Certification and Comfomity.

Tecnalia · Parque Científico y Tecnológico de Bizkaia Edificio 700, 48170 Bizkaia, Spain, jone.echazarra@tecnalia.com, www.tecnalia.com/en

Producer

Teledyne e2v Ltd is a leading designer and manufacturer of high performance image sensors (CMOS, CCD, EMCCD) and cameras for a broad range of applications including machine vision, medical, science,

aerospace and defense imaging. e2v produces the class-leading Uniiqa+, Eliixa+, Aviiva, and Diviina line scan camera ranges, which address a broad range of applications.

Teledyne e2v Ltd · 106 Waterhouse Lane, CM1 2QU Chelmsford, United Kingdom, www.teledyne-e2v.com/

Producer

Teledyne Innovaciones Microelectronicas SLU is specialized in the design and production of custom high-speed, high-performance CMOS camera systems on-chip (camera SoC) and vision systems on-chip (VSoC) for industrial, surveillance, scientific, and medical ap-

plications. The team consists of fifty experienced and highly specialized engineers and PhDs expert in high-performance image sensor and SoC design, and in all aspects of vision technology.

Teledyne Innovaciones Microelectronicas SLU
C/ Isaac Newton 4, Pabellón de Italia, Planta 5 SE-NE, 41092 Sevilla, Spain, Tel.: +34 954 081 273, https://teledyne-anafocus.com

Solution Provider, Producer

MSC and SGCC started inside two famous glassmakers: 1963 MSC is created within BSN, as a small department, to invent on-line inspection solutions for its hollow glass production. 1973 SGCC starts its existence

within Saint-Gobain glassmaker to perform multi-inspection on glass containers with the first star-wheel principle machine. On December 1st, 2015 the corporate name of the company has changed for Tiama.

Tiama Group · ZA des Plattes, 1 Chemin des Plattes, 69390 Vourles, France, www.tiama.com

Producer

Tordivel AS · Storgata 20, 184 Oslo, Norway, Tel.: +47 2315 870 0, office@toridvel.no, www.scorpionvision.com

Producer

TriVision · Havnegade 23, 5000 Odense, Denmark, Tel.: +45 28 353 135, korsgaard@trivision.dk, www.trivision.dk

Integrator

Operating in Europe, US and Asia markets for over 20 years, TST Engineering & Vision is specialized in artificial vision products and solutions. The

company designs, develops deploy and market artificial vision systems for quality control, track & trace of industrial processes.

TST Engineering & Vision · Rua do Centro Empresarial Beloura Office Park Edificio 7 - Piso 0 - Loja 2, 2710 - 693 Sintra, Portugal, contact@tstvision.com, www.tstvision.com

Producer

TVI Vision · Asentajankatu 3, 880 Helsinki, Finland, Tel.: +358 207 579 518, www.tvivision.com

Association

UKIVA - UK Industrial Vision Association · Stafford Road, SM6 9AA Wallington, Surrey, United Kingdom, Tel.: +44 20 8773 8111, chris.valdes@ppma.co.uk, www.ukiva.org

University

The University of Brescia offers a wide range of educational programmes with Bachelor's and Master of Science (MSc) degrees, postgraduate technical courses, residency programmes and PhD programmes in most areas: busi-

ness and economics, engineering and technology, law, medicine and surgery. The University of Brescia is engaged in various collaborative networks, both nationally and internationally.

University of Brescia - Department of Mechanical and Industrial Engineering (DIMI) · Via Branze 43, 25123 Brescia, Italy, https://en.unibs.it/departments/mechanical-and-industrial-engineering

Integrator, Solution Provider

Univision Srl · via Appiani 3, 20038 Seregno, Italy, Tel.: +39 0362 600 201, info@univision.it, www.univision.it

Machine Builder/OEM

Videometer A/S · Lyngso Allé 3, 2970 Horsholm, Denmark, Tel.: +45 457 610 77, info@videometer.com, www.videometer.com

Distributor, Producer

Vision Light Tech · Protonenlaan 22, 5405 NE Uden, Netherlands, Tel.: +31 413 260 067, info@vlt.nl, www.visionlighttech.com

Distributor

Visionlink Srl · Via Marco Polo 22, 20038 Seregno, Italy, Tel.: +39 0362 600 202, info@visionlink.it, www.visionlink.it

Distributor, Integrator, Solution Provider

Vistek Machine Vision and Automation AS · Kemal Nehrozoglu caddesi, 41480 Kocaeli, Turkey, Tel.: +90 262 678 89 02, info@vistekas.com, www.vistekas.com

Producer

V-Optics designs, manufactures and sells sensors and measurement systems enable to characterize light reflective and transparent surfaces. The proposed solutions are based on phase shifting deflectometry technol-

ogy. V-Optics developed a set of sensors and equipment for several applications used in various industries, e.g. Plastics and Composites, Glazing, Paper Mills, Medical Devices.

V-Optics SAS · ZAC Mermoz - Espace Mermoz 10, rue du 11ème Régiment d'Aviation, 57155 Marly, France, Tel.: +33 3 87 76 86 90, info@v-optics.fr, www.v-optics.fr

Research Facility

Vicomtech (Visual Interaction and Communication Technologies Centre) is an applied research centre specialising in Advanced Interaction, Computer Vision, Data Analytics and Computer Graphics technologies. The centre aims to respond to the innovation requirements of companies and institutions. To do this, it conducts applied research and develops multimedia visual interaction and communications technologies.

Vicomtech · Paseo Mikeletegi 57, Parque Científico y Tecnológico de Gipuzkoa, 20009 Donostia / San Sebastian, Spain, Tel.: +34 943 309 230, info@vicomtech.org, www.vicomtech.org/en

Producer

Video Systems is a company specialised on embedded vision systems develop and production. A 20th year experienced staff support customer on R&D, develop and production of industrial quality control and process control systems. 3D acquisition and elaboration and neural network systems are key-points of final systems.

Video Systems · Via Marinelli 1/1, 33033 Codroipo (UD), Italy, info@videosystems.it, https://videosystems.it/en/

Other

The Vision Club of Finland has over 200 members representing machine vision companies, endusers, universities and research organisations.

Vision Club of Finland · Asemapäällikönkatu 12 B, 00520 Helsinki, Finland, Tel.: +358 50 400 6624, office@automaatioseura.fi, www.automaatioseura.fi/in-english/

Distributor, Integrator

ViTec was established in 1995 with headquarters located in Saint-Petersburg. Since that time the company has been working in the field of industrial measurements and automation. Through access to modern technologies and technical equipment the team of professionals can efficiently solve the most complex technical problems. In order to increase the speed of customer service in Siberia and the Far East a ViTec-Siberia department was opened in 2006 in Tomsk.

ViTec · Fontanka 170, 198035 Saint-Petersburg, Russian Federation, info@vitec.ru, www.vitec.ru

Producer

VST Europe is a subsidiary of VS Technology, a Japanese developer and manufacturer of sophisticated imaging equipment with a focus on lenses and lighting solutions. The company supports the machine vision market with advanced optical know-how to meet the customers' various requirements. With the growth of IT and electronics industries, we are seeing high performance yet light and compact machine vision products.

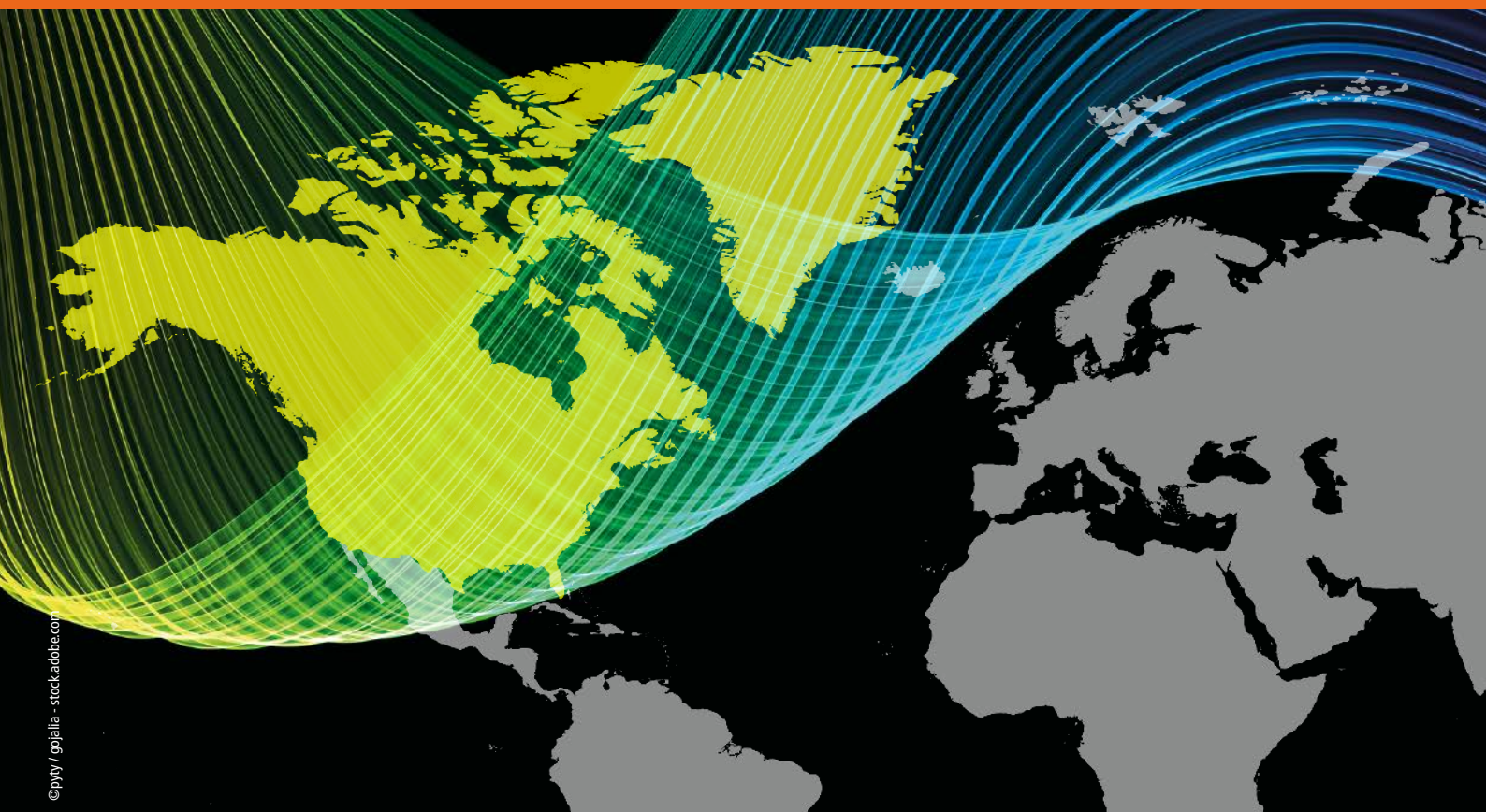
VST Europe B.V · Herikerbergweg 292-342, 1101 CT Amsterdam, Netherlands, Tel.: +31 20 305 13 10, https://vst.co.jp/en

Producer, Research Facility, Solution Provider

Xenics is a pioneer of path-breaking infrared technology with a proven track record of more than ten years. Xenics designs and markets infrared imagers, cores and cameras of best-in-class image quality to support innovative R&D, industrial automation, machine vision, process control and high-end security applications. The company offers a complete portfolio of line-scan and 2D area-scan products for the VisNIR, SWIR, MWIR and LWIR ranges.

Xenics · Ambachtenlaan 44, 3001 Leuven, Belgium, Tel.: +32 16 389 900, sales@xenics.com, www.xenics.com

North America



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NORTH AMERICA

Consultant, Distributor, Integrator, Machine Builder/OEM, Research Facility, Solution Provider

3D Infotech, Inc. · 7 Hubble, 92618 Irvine, CA, United States of America, Tel.: +1 949 988 02 00, info@3dinfotech.com, www.3dinfotech.com

Solution Provider

A&B Software · 5 Holly Ter, 6320 New London, CT, United States of America, Tel.: +1 860 823 83 01, sales@ab-soft.com, www.ab-soft.com

Machine Builder/OEM

Acculogic Inc. · 175 Riviera Drive, L3R 5J6 Markham, ON, Canada, Tel.: +1 905 475 59 07, sales@acculogic.com, www.acculogic.com

Machine Builder/OEM

Acculogic Ltd. · 112-20992 Bake Parkway, 92630 Lake Forest, CA, USA, Tel.: +1 949 595 40 80, sales@acculogic.com, www.acculogic.com

Producer

Advanced Optics, Inc.
PO Box 117, 53072 Pewaukee, WI, United States of America, Tel.: +1 262 548 11 51, sales@advancedoptics.com, www.advancedoptics.com

Machine Builder/OEM

AGR International, Inc.
615 Whitestown Road, 16001 Butler, PA, United States of America, Tel.: +1 724 482 21 63, sales@agrintl.com, www.agrintl.com

Distributor

Allied Scientific Pro
815 Boul. de la Carrière, bureau 202, J9J2S8 Gatineau, QC, Canada, Tel.: 1 800 253 41 07, info@alliedscientificpro.com, www.alliedscientificpro.com

Producer

Allison Park Group, Inc.
4055 Alpha Drive, 15101 Allison Park, PA, United States of America, Tel.: +1 412 487 82 11, sales@apgvision.com, www.apgvision.com

Machine Builder/OEM

Altair Industries, Inc.
217 Racquette Drive, #5, 80524 Fort Collins, CO, United States of America, Tel.: +1 970 217 16 23, altair.industries@comcast.net, www.altairindustriesinc.com

Machine Builder/OEM

Applied Electro-Optics Inc.
10619 Senna Hills DR, 78733-5729 Austin, TX, United States of America, Tel.: +1 512 686 07 52, sales@aeousa.com, www.aeousa.com

Producer, Solution Provider

Asylum Research
6310 Hollister Ave., 93117 Santa Barbara, CA, United States of America, Tel.: +1 805 696 64 66, sales@asylumresearch.com, www.asylumresearch.com

Distributor

AutomationDirect
3505 Hutchinson Road, 30040 Cumming, GA, United States of America, Tel.: +1 800 633 04 05, sales@automationdirect.com, www.automationdirect.com

Distributor

By combining innovative technology and customer-oriented service, Baumer ranks among the leading manufacturers of digital cameras and vision sensors. Modern image processing applications face the challenge of successfully completing complex inspection tasks at top speed. Baumer products are specially developed for demanding applications with high performance and quality requirements. With long-time stable reliability, versatility and easy integration, they convince customers all over the world.

Baumer Ltd. · 122 Spring Street, Unit C-6, 6489 Southington CT, United States of America, Tel.: +1 860 621 2121, sales.us@baumer.com, www.baumer.com

Producer

"Any Lens. Any Camera." Birger Engineering manufactures lens mounts and motion control systems for high-quality low-cost lenses made for consumer and professional imaging. Remote and automated control of focus and aperture.

Birger Engineering Inc. · 38 Chauncy Street 1101, 02111 Boston, MA, United States of America, info@birger.com, www.birger.com/

Other

BitFlow has been developing industrial frame grabbers & software for the imaging industry since 1993. We specialize in interfacing to cameras with very high data/frame rates; working in environments with complex triggering and I/O requirements; and running in applications where every CPU cycle is precious. Our primary interfaces are Camera Link & CXP. Our software is some of the easiest to use, yet incredibly powerful and reliable. We are confident that we can solve your imaging challenges.

BitFlow, Inc. · 400 W Cummings Park, Suite 5050, 1801 Woburn, MA, United States of America, Tel.: +1 781 932 29 00, sales@bitflow.com, www.bitflow.com

Distributor

Bock Optronics Inc. · 14 Steinway Blvd., Suite 7, M9W 6M6 Toronto, ON, Canada, Tel.: +1 416 674 28 04, sales@bockoptronics.ca, www.bockoptronics.ca

Producer, Solution Provider

Breault Research Organization
2175 E Valencia Rd #125, 85706 Tucson, AZ, United States of America, Tel.: +1 520 721 05 00, marketing@breault.com, www.breault.com

Producer

Capovani Brothers Inc. · 704 Prestige Parkway, 12302 Scotia, NY, United States of America, Tel.: +1 518 346 83 47, cbi@capovani.com, www.capovani.com

Integrator

Cepoint Networks, LLC. · 1W Otterson Street, 03060-4500 Nashua, NH, United States of America, Tel.: +1 603 883 79 79, sales@cepoint.com, www.cepoint.com

Solution Provider

Cimetrix Inc. · 6979 S. High Tech Drive, Salt Lake City, UT 84047, United States of America, Tel.: +1 801 256 65 00, sales@cimetrix.com, www.cimetrix.com

Solution Provider

Cogniac enables enterprise customers to extract information from ever-increasing streams of video and image data. If you can see an item or condition of interest — even if it requires professional expertise — the system can automatically observe images and video and detect that item. Using modern advances in deep learning, the products achieve better-than-human performance at many highly-focused observation tasks.

Cogniac Corporation · 150 Almaden Blvd, Suite 1200, 95113 San Jose, CA, United States of America, contact@cogniac.co, www.cogniac.co

Producer

Coherent Canada · 275 Kesmark, H9B3J1 Montreal, QC, Canada, Tel.: +1 514 685 22 03, lasers@stockeryale.com, www.coherent.com

Research Facility, Solution Provider

Coherix, Inc. · 3980 Ranchero Drive, 48108-2775 Ann Arbor, MI, United States of America, Tel.: +1 734 922 40, rons@coherix.com, www.coherix.com

Solution Provider

Complete Inspection Systems, Inc. · 334 Fourth Avenue, 32903 Indialantic, FL, United States of America, Tel.: +1 321 952 24 90, gparish@autoproofpro.com, www.completeinspectionssystem.com

Producer

Components Express, Inc. is an authorized manufacturer and global supplier of CameraLink and related cable assemblies serving the Machine Vision Industry. Components Express' extensive product development & engineering support is recognized throughout the industry as being the forefront in cabling technology. Specializing in both custom and standard applications. Come visit us today and see why Components Express is the worlds' greatest machine vision cable manufacturer!

Components Express, Inc. · 10330 Argonne Woods Drive Suite 100, 60517 Woodridge, IL, United States of America, Tel.: +1 630 257 605, cei@componentsexpress.com, www.componentsexpress.com

Producer

Computer Dynamics · 7640 Pelham Road, Greenville, SC 29615, United States of America, Tel.: +1 864 627 88 00, cdisales@gefanc.com, www.cdynamics.com

Machine Builder/OEM

Crowley Company, The · 5111 Pegasus Court, Suite M, 21704 Frederick, MD, United States of America, Tel.: +1 240 215 02 24, cherib@thecrowleycompany.com, www.thecrowleycompany.com

Producer

CyberOptics Semiconductor, Inc. · 13555 SW Millikan Way, Beaverton, OR 97005, United States of America, Tel.: +1 503 495 22 00, csinfo@cyberoptics.com, www.imagenation.com

Integrator

Cyth Systems, Inc. · 9835 Carroll Centre Road, Suite 104, 92126 San Diego, CA, United States of America, Tel.: +1 888 508 73 55, info@cyth.com, www.cyth.com

Machine Builder/OEM

Deposition Sciences, Inc. (DSI) · 3300 Coffey Lane, 95403 Santa Rosa, CA, United States of America, Tel.: +1 707 573 67 85, solutions@depisci.com, www.depisci.com

Distributor

Digital West Imaging · 450 Mountain View Road, El Cajon, CA 92021, United States of America, Tel.: +1 866 593 19 00, sales@digitalwestimaging.com, www.digitalwestimaging.com

Producer

Directed Perception · 890C Cowan Road, Burlingame, CA 94010, United States of America, Tel.: +1 650 692 39 00, sales@dperception.com, www.dperception.com

Machine Builder/OEM

Dover Motion · 159 Swanson Road, 1719 Boxborough, MA, United States of America, Tel.: +1 800 227 1066, sales@dovermotion.com, dovermotion.com/

Solution Provider

Dunkley International Inc. · 1910 Lake St., MI 49001 Kalamazoo, United States of America, Tel.: +1 269 343 55 83, nhatzinikolis@dunkleyintl.com, www.dunkleymachinevision.com

Machine Builder/OEM

E-con Systems · 11027 Sandistan Manor Ct, 63146 St Louis, MO, United States of America, Tel.: +1 314 732 11 52, sales@e-consystems.com, www.e-consystems.com

Producer

EDT Engineering Design Team Inc. · 3423 NE John Olsen Avenue, 97124 Hillsboro, OR, United States of America, Tel.: +1 503 690 12 34, info@edt.com, www.edt.com

Producer

Epix, Inc. · 381 Lexington Drive, Buffalo Grove, IL 60089-6934, United States of America, Tel.: +1 847 465 18 18, epix@epixinc.com, www.epixinc.com

Producer

FastVision · 131 D.W. Highway #529, 3060 Nashua, NH, United States of America, Tel.: +1 603 891 43 17, sales@fast-vision.com, www.fast-vision.com

Producer

Fiberoptics Technology · 1 Quassett Road, Pomfret, CT 06258, United States of America, Tel.: +1 860 928 04 43, sgiamundo@fiberoptix.com, www.fiberoptix.com

Producer

FIFo Optics Co., Ltd. · 2010 Crow Canyon Place, Suite 100, 94583 San Ramon, CA, United States of America, Tel.: +1 925 234 48 68, fiorinashen@fifooptics.com, www.fifooptics.com

Producer

FJW Optical Systems, Inc. · 322 N Woodwork Ln, Palatine, IL 60067-4933, United States of America, Tel.: +1 847 358 25 00, irsales@findscope.com, www.findscope.com

Producer

Flir Integrated Imaging Solutions Inc., formerly Point Grey Research., is a global leader in the design and manufacture of innovative, high-performance digital cameras for industrial, medical and life science, traffic, biometric, GIS, and people counting applications.

Producer

Flir Integrated Imaging Solutions Inc. · 12051 Riverside Way, V6W 1K7 Richmond, BC, Canada, Tel.: +1 604 242 99 37, mv-sales@flir.com, www.flir.com/mv

Flir Systems is a global leader in the design and manufacture of innovative machine vision cameras. Starting with the acquisition of Point Grey in 2016, Flir is developing a machine vision center of excellence with the goal of delivering best-in-class customer experiences and helping our customers be more competitive.

Machine Builder/OEM, Solution Provider

Flir Systems, Inc. · 12051 Riverside Way, Richmond, BC V6W 1K7, Canada, Tel.: +1 604 242 99 37, mv-sales@flir.com, www.flir.com/mv

Machine Builder/OEM, Solution Provider

Fresh Digit · 22671 Brookhaven, 92630 Lake Forest, CA, United States of America, Tel.: +1 949 204 02 88, online@freshdigit.com, www.freshdigit.com

Integrator, Solution Provider

FSI Technologies Inc. · 668 Western Ave., 60148 Lombard, IL, United States of America, Tel.: +1 630 932 93 80, info@fsinet.com, www.fsinet.com

Producer

Gevicam Inc. · 673 S. Milipitas Blvd, Milpitas, CA 95035, United States of America, Tel.: +1 408 262 57 72, info@gevicam.com, www.gevicam.com

Other

HD Barcode LLC · 334 Fourth Ave, 32903 Indialantic, FL, United States of America, Tel.: +1 321 862 24 89, gparish@hdbarcode.com, www.hdbarcode.com

Producer

Imaging Solutions Group · 1387 Fairport Road, 14450 Fairport, NY, United States of America, Tel.: +1 585 388 52 20, sales@isgcameras.com, www.isgcameras.com

Producer

Imperx · 6421 Congress Avenue, 33487 Boca Raton, FL, United States of America, Tel.: +1 561 989 00 06, sales@marketing.com, www.imperx.com

Producer

Intercon 1 · 7746 Goedderz Rd., Ste 110, 56425 Buxter, MN, United States of America, Tel.: +1 218 828 31 57, intercon@nortechsys.com, www.intercon-1.com

NORTH AMERICA

Producer

IO Industries · 15940 Robin's Hill Road, N5V 0A4 London, ON, Canada, Tel.: +1 519 663 95 70, sales2@ioindustries.com, www.ioindustries.com

Machine Builder/OEM, Producer, Solution Provider

ISVI Corp. · 290 Highland Ave 2nd Fl, 6410 Cheshire, CT, United States of America, Tel.: +1 951 317 00 19, sales@isvi-corp.com, www.isvi-corp.com

Producer

JAI is a global manufacturer of digital cameras for machine vision, traffic imaging, global security, medical imaging and scientific research. Besides a broad range of leading-edge 1-CMOS progressive area scan and line scan cameras, JAI is a leading provider of multi-imager cameras incorporating advanced prism-block technology, including 3-CMOS RGB area scan cameras, 2-CMOS multi-spectral cameras plus a complete family of 3-CMOS/4-CMOS line scan cameras. JAI's product program includes cameras for visible, UV, NIR and SWIR imaging with GigE Vision, USB3 Vision, CoaXPress, Camera Link and SFP+ interfaces.

JAI Inc. - USA · 6800 Santa Teresa Blvd., Suite 175, 95119 San Jose CA, United States of America, Tel.: +1 408 383 0300, camerasales.americas@jai.com, www.jai.com

Producer

Lambda Research Corporation · 25 Porter Road, 01460-1434 Littleton, MA, United States of America, Tel.: +1 978 486 07 66, sales@lambdare.com, www.lambdare.com

Distributor

LDD Trading Associates, LLC · 119B Emerson Road, 3055 Milford, NH, United States of America, Tel.: +1 603 732 57, sales@lddlight.com, www.lddlight.com

Producer

Lincoln Laser Company · 234 East Mohave, Phoenix, AZ 85004, United States of America, Tel.: +1 602 257 04 07, bcmcgrath@lincolnlaser.com, www.lincolnlaser.com

Solution Provider

At LMI Technologies we work to advance quality and productivity with 3D sensor technology. Our award-winning, FactorySmart solutions improve the quality and efficiency of factory production by providing fast, accurate, reliable inspection solutions that leverage smart 3D technologies.

Unlike contact based measurement or 2D vision, our products remove complexity and dramatically reduce implementation cost while achieving repeatable, highly accurate measurement.

LMI Technologies Inc. · 9200 Glenlyon Parkway, V5J 5J8 Burnaby, BC, Canada, Tel.: +1 604 636 10 11, contact@lmi3d.com, www.lmi3d.com

Machine Builder/OEM

Lumetrics, Inc. · 1565 Jefferson Rd, #420, 14623 Rochester, NY, United States of America, Tel.: +1 585 214 24 55, sales@lumetrics.com, www.lumetrics.com

Producer

Mad City Labs, Inc. · 2524 Todd Drive, 53713 Madison, WI, United States of America, Tel.: +1 608 298 08 55, sales@madcitylabs.com, www.madcitylabs.com

Producer

Matrox Imaging · 1055 St. Regis Blvd., H9P 2T4 Dorval, QC, Canada, Tel.: +1 514 822 60 20, imaging.info@matrox.com, www.matroximaging.com

Machine Builder/OEM

Mega Speed Corporation · 45 MainSt S, Unit B, R0J 1E0 Minnedosa, Manitoba, Canada, Tel.: +1 204 867 37 67, info@egaspeedusa.com, www.egaspeedusa.com

Producer

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Consultant

Michigan Metrology LLC · 17199 N. Laurel Park Drive Ste. #51, 48152-2679 Livonia, MI, United States of America, Tel.: +1 734 953 50 30, info@michmet.com, www.michmet.com

Producer

Midwest Optical Systems, Inc. · 322 N. Woodwork Lane, 60067 Palatine, IL, United States of America, Tel.: +1 847 359 35 50, info@midopt.com, www.midopt.com

Distributor, Integrator, Solution Provider

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Consultant, Integrator, Machine Builder/OEM, Producer, Research Facility, Solution Provider

Nanovea · 6 Morgan Ste 156, 92618 Irvine, CA, United States of America, Tel.: +1 949 461 92 92, info@nanovea.com, nanovea.com/profilometers

Producer, Solution Provider

Navitar · 200 Commerce Drive, 14623 Rochester, NY, United States of America, Tel.: +1 585 359 40 00, info@navitar.com, www.navitar.com

Association, Machine Builder/OEM, Solution Provider, Other

Newnex Technology Corporation · 3041 Olcott St., 95054 Santa Clara, CA, United States of America, Tel.: +1 408 986 99 88, information@newnex.com, www.newnex.com

Consultant, Integrator, Machine Builder/OEM, Research Facility, Solution Provider, Other

Norman N. Axelrod Associates · 445 East 86th Street, 10028 New York, NY, United States of America, Tel.: +1 212 741 63 02, naxelrod@axelrodassociates.com, www.axelrodassociates.com

Producer

Norpix, Inc. · 1751 Richardson St., Suite 6117, H3K1G6 Montreal QC, Canada, Tel.: +1 514 846 0009 ex:22, ln@norpix.com, www.norpix.com

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Northwire Technical Cable · 110 Prospect Way, 54020 Osceola, WI, United States of America, Tel.: +1 715 294 21 21, cableinfo@northwire.com, www.northwire.com

Producer

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Producer

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ON Semiconductor · 5005 East McDowell Road, 85008 Phoenix, AZ, United States of America, imagers@onsemi.com, www.onsemi.com/products/sensors/image-sensors-processors

Solution Provider

Optel Vision · 2680, boul. du Parc Technologique, G1P 4S6 Quebec City, QC, Canada, Tel.: +1 418 688 334, info@optelvision.com, www.optelvision.com

Producer

Optical Research Associates - Wholly Owned Subsidiary of Synopsys, Inc.
199 South Los Robles Avenue, Suite 400, 91101 Pasadena, CA, United States of America, Tel.: +1 626 795 91 01, optics@synopsys.com, www.opticalres.com

Integrator

Orus Integration Inc. · 1109 Hwy 13, H7W 5J8 Laval, QC, Canada, Tel.: +1 450 688 31 51, ldicaire@orusintegration.com, orusintegration.com

Distributor

PCE Instruments / PCE Americas Inc.
711 Commerce Way, Suite 8, 33458 Jupiter, FL, United states of America, Tel.: +1 561 320 91 62, info@pce-americas.com, www.pce-instruments.com

Distributor

Phase 1 Technology
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Solution Provider

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Producer

Pixelink · 1900 City Park Drive, Suite 410, K1J 1A3 Ottawa, ON, Canada, Tel.: +1 613 247 12 11, sales@pixelink.com, www.pixelink.com

Machine Builder/OEM

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Pleora Technologies · 340 Terry Fox Dr, Suite 300, K2K 3A2 Ottawa, ON, Canada, Tel.: +1 613 270 06 25, info@pleora.com, www.pleora.com

Producer

Power Technology, Inc.
PO Box 191117, 72219-1117 Little Rock, AR, United States of America, Tel.: +1 501 407 07 12, sales@powertech.com, www.powertech.com

Producer

PPT Vision · 6301 Old Shakopee Road, 55438 Bloomington, MN, United States of America, Tel.: +1 952 996 95 00, sales@pptvision.com, pptvision.com

Solution Provider

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Producer

ProPhotonix designs and manufactures machine-vision structured light laser modules, LED linescan illuminators, chip-on-board LED ring, spot, area and line lights, a wide range of laser modules, including fiber-coupled, for industrial, medical, security, defense and transportation industries. We also distribute laser diodes manufactured by industry leaders including Sony, Oclaro/Opnext, Ondax and QSI. In addition, ProPhotonix creates custom OEM lighting solutions for scientific and industrial applications.

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Producer

Teledyne Dalsa Rad-Icon Imaging · 765 Sycamore Drive, 95035 Milpitas, CA, United States of America, Tel.: +1 408 736 60 00, sales.rad-icon@teledynedalsa.com, www.rad-icon.com

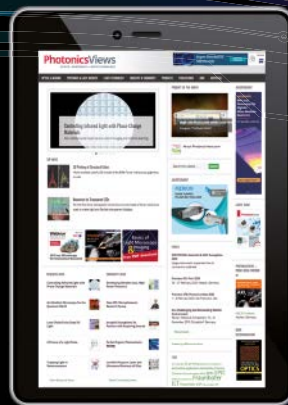
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Solution Provider

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Machine Builder/OEM

Sensors Unlimited, Inc. · 3490 Route 1 Building 12, 08540-5914 Princeton, NJ, United States of America, Tel.: +1 609 520 06 10, karen.jeffers@goodrich.com, www.sensorsinc.com

Integrator

Serview, Inc. · 420D Kelley Drive, 8091 West Berlin, NJ, United States of America, Tel.: +1 856 719 90 34, stevel@serview.net, www.serview.net

Producer

Servo-Robot Inc. · 1370 Hocquart, J3V 6E1 St-Bruno, QC, Canada, Tel.: +1 450 653 78 68, sales@servorobot.com, www.servorobot.com

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Producer

Spectrum Illumination · 5114 Industrial Park Rd., 49437 Montague MI, United States of America, Tel.: +1 231 894 4590, sales@spectrumillumination.com, www.spectrumillumination.com

Solution Provider

SPG Data 3D Corporation · 2151 Leonard de Vinci, J3E 1Z3 Ste-Julie, QC, Canada, Tel.: +1 450 922 35 15, sales@spgdata3d.com, www.spgdata3d.com

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Producer

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Consultant, Distributor, Integrator

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Producer

Tekstar Optical Inc. · 270 Kohr Rd., 11754-1237 Kings Park, NY, United States of America, Tel.: +1 631 663 35 58, info@tekstaroptical.com, www.tekstaroptical.com

Machine Builder/OEM

Toshiba Imaging Systems Division · 9740 Irvine Blvd., 92618-1697 Irvine, CA, United States of America, Tel.: +1 877 595 44 25, vincent.giovinco@tais.toshiba.com, www.cameras.toshiba.com

Solution Provider

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Distributor

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Integrator, Solution Provider

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Producer

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Consultant

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Machine Builder/OEM

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Machine Builder/OEM

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Other

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Consultant, Distributor

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Distributor, Solution Provider

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Producer, Solution Provider

Gidel Ltd. · 2 Ha'ilan St. P.O.Box 281, 30600 Or Akiva, Israel, Tel.: +972 4 610 25 00, sales_eu@gidel.com, www.gidel.com

Producer

Goyo Optical Inc. · 3-8-31 Hamazaki, 351-0033 Asaka-Saitama, Japan, Tel.: +81 48 474 22 35, info@goyooptical.com, www.goyooptical.com

Solution Provider

Guangzhou Eusens Technology Co.,Ltd · Panyu Luoxi, 510075 Guangzhou, ACT, China, Tel.: +1 3760 812 861, sales@panasonicservomotor.com, panasonicservomotor.com/e5cn/

Producer

Hangzhou Hikvision Digital Technology Co. No.555 Qianmo Road, Binjiang District, 310051 Hangzhou, China, Tel.: +86 571 88075998, overseasbusiness@hikvision.com, www.hikvision.com

Producer

Hirakawa Hewtech, which established in September 1948 in Tokyo, is specializing in manufacturing and sales of electric wires for the electrical and electronic industries and consistently pursue leading-edge technologies that fill the needs of the times. In the field, Hirakawa Hewtech has developed a wide range of cables including Camera Link, USB3Vision, GigE Vision, CoaXPress and IEEE 1394b cable.

Hirakawa Hewtech Corp. · 6F JK-Omori Bldg., 3-28-10 Minami -oi Shinagawa-ku, Japan, eigyo@hewtech.co.jp, www.hewtech.co.jp/en

Producer

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Innomiles International Co. Ltd. 4F-3, No.137, Sec. 1, Fuxing S. Rd., Da'an Dist., 10666 Taipei City, Taiwan, Tel.: +886 2 877 361 36, sales@innomiles.com, www.innomiles.com

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JAI Ltd. - Japan · 10-35 Sakae-chou Kanagawa-ku, 221-0052 Yokohama, Kanagawa, Japan, Tel.: +81 45 440 0154, camerasales.apac@jai.com, www.jai.com

Association

Japan Industrial Imaging Association 2-10-15, Nakameguro, Yamate Ave. K Bldg., 153-0061 Meguro, Tokyo, Japan, Tel.: +81 3 371 639 33, info@jiiia.org, www.jiiia.org

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Machine Builder/OEM, Solution Provider

KOS Laboratory Homogenizer · A18 Second Floor, Building 1, Shunlian Machinery Plaza, ChenCun Town, 528313 Foshan, Guangdong, China, Tel.: +86 757 293 185 41, drbluejack@yahoo.com, www.emulsifyingmixer.com/homogenizer/lab-homogenizer.html

Distributor, Machine Builder/OEM, Producer, Solution Provider

Lanoptik Technologies Ltd.
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Machine Builder/OEM

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5th floor, building 52, No.5688, LongWu Road, 200241 Shanghai, China, Tel.: +86 21 335 881 22, sale@leading-techlaser.com, www.leading-techlaser.com

Producer

Mega Phase Industrial Inspection Technology (Shanghai) Co., Ltd. (Mega Phase Technology), as the leading industrial structured light 3D camera manufacturer and a member of Shanghai Software Industry Association, is located in Shanghai Zhangjiang Science City. Since the establishment, the company has achieved great technical development and obtained a number of patent certificates, including invention patents, utility model patents and software copyrights.

Mega Phase Industrial Inspection Technology(Shanghai) Co., Ltd.
#1690 Cailun Road, Pudong New District Room 408-410, 201203 Shanghai, China, Tel.: +86 21 63631362, marketing@mega-phase.cn, www.mega-phase.cn/3dvision

Producer

Nacacue Corporation was established in August 1980. The company specializes in developing new technology. Specifically in fields closely link to trends in society. It manufactures optical equipment, LED lighting solutions and electronic control systems for industrial machine vision. The company goal is to contribute to the societies in which our customers are located through developing new technology to cultivate new markets.

Nacacue Corporation
194-1, Higashitsuchikawa-cho, Kuze, Minami-ku, 601-8204 Kyoto, Japan, Tel.: +81 75 934 41 78, info@nacacue.co.jp, www.nacacue.com

Producer

NED (Nippon Electro-Sensory Devices Ltd.
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Integrator

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Producer

OPT Machine Vision Tech Co., LTD
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Distributor, Machine Builder/OEM, Solution Provider

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Producer

Proteus Electronics Pvt. Ltd. · 18D, Kandivali Industrial Estate, Charkop, Kandivali (W), 400067 Mumbai, India, Tel.: +91 22 286 047 77, sales@proteuselectronics.in, www.proteuselectronics.in

Machine Builder/OEM

RAA Vision Pvt Ltd. · Om vihar, 110058 New Delhi, Delhi, India, Tel.: +91 99 116 902 40, amit@raavision.com, www.raavision.com

Machine Builder/OEM

Runma Cartesian Robot Arm Co., Ltd. · Yuning Industrial Zone, Hengli Town, 523461 Dongguan, Fujian, China, Tel.: +86 769 821 819 87, runmarobot@jeawin.com, www.runmarobot.com

Producer

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Solution Provider

Sualab is an artificial intelligence-based provider of Deep Learning Machine Vision Solutions. The company combines the technologies of those industries to fuel research into various technologies and products that make human life more convenient. In particular, Sualab enables inspection of the manufacturing industry by researching various machine vision systems that can replace the human eye in the industrial field.

Sualab · Gwanak-ro 1 Seoul National University Research Park Main Building Suite 511, Seoul Gwanak-gu, Republic of Korea, Tel.: +82 2 626 403 62, sales@sualab.com, www.sualab.com

Solution Provider

TMS Lite Sdn Bhd · 2A-2, Tingkat Kenari 5, Desa Ria, Sungai Ara, 11900 Bayan Lepas, Penang, Malaysia, Tel.: +604 646 84 28, sales@tms-lite.com, www.tms-lite.com

Producer

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Integrator

View-Factor · Av Circunvalacion, Cochabamba, Bolivia, Tel.: +591 4 445 45 95, agalindo@view-factor.com, www.view-factor.com

Producer

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Viewworks Co., Ltd. · 41-3, Burim-ro 170beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14055 Republic of Korea, Tel.: +82 70 7011 6161, vision@viewworks.com, vision.viewworks.com

Producer, Integrator

Located in Shanghai, China, xVision provides automation solutions for manufacturers, focusing on 3C (Computer, Communication, Consumer Electronics) customers. They have a powerful team that includes Structure Design, Robotic Application and Machine Vision Application. xVision provides a one of a kind 3D sensor that outputs Depth image, RGB images and Point Cloud data and wants to be one of the leading Machine Vision companies in China.

xVision Automation S&T Shanghai Inc. · 2F, Building C509, Caobao Road, Xuhui, 201108 Shanghai, China, Tel.: +86 18 621 600 840

Solution Provider

The Huaray Tech is machine vision subsidiary of Dahua Technology CO., LTD. Dahua Technology is a leading advanced video surveillance solution provider with a complete product portfolio including an advanced series of front to back end devices, display, software, smart home solutions, access controls and alarms as well as intelligent traffic systems.

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Flir Systems	www.flir.com/mv
Fluke	www.fluke.de
Fort	www.fort-fr.com
Framos	www.framos.eu
Fraunhofer IMS	www.ims.fraunhofer.de
FSI Technologies	www.fsinet.com
Fuzhou Feihua Optoelectronic Technology	www.fzfh.com
G4 Technology	www.g4.com.tw
Gevicam	www.gevicam.com
Gpixel	www.gpixelinc.com/
Gsvitec	www.gsvitec.com
Hamamatsu Photonics	www.hamamatsu.com
Helion	www.helionvision.com
Heliotis	www.heliotis.ch
Hexagon DEU01	www.hexagonmi.com
High Speed Vision	www.hsvision.de
Hitachi Kokusai Electric Europe	www.Hitachi-keu.com
Horn Imaging	www.horn-imaging.de
Ico Data	www.icodata.de
IDS	www.ids-imaging.com
Ifm electronic	www.ifm.com
Ikegami	www.ikegami.de
Illunis	www.illunis.com
Image House	www.imagehouse.dk
Image S	www.imagessrl.com
Imaging Solutions Group	www.isgcameras.com
Imi tech	www.imi-tech.com
Imperx	www.imperx.com
IMS Chips	www.ims-chips.de
Industrial Vision Systems	www.industrialvision.co.uk
Infaimon	www.infaimon.com

InfraTec	www.infratec.de
Innomiles International	www.innomiles.com
Insensiv	www.insensiv.de
IOS	www.ios-web.de
Ircam	www.ircam.de
IS Imaging Solutions	www.imaging-solutions.de
ISVI	www.isvi-corp.com
JAI	www.jai.com
Japan F.A. Systems	www.jfas.co.jp
JenCam	www.jencam.de
Jenoptik	www.jenoptik.de
Kamera Werke Dresden	www.kwdo.de
Kappa opto-electronics	www.kappa.de
Karlheinz Hinze Opto-engineering	www.hinze-opto.de
KeeKoon Electronics	www.keekoon.com
Klughammer	www.klughammer.de
Kvant	www.kvant.sk
Lambda Photometrics	www.lambdaphoto.co.uk
Lambert Instruments	www.lambert-instruments.com
Leitner Industrial Endoscopy	www.leitner-efer.de
Leutron Vision	www.leutron.com
Leuze Electronic	www.leuze.com
LMI Technologies	www.lmi3d.com
Lord Ingenierie	www.lord-ing.com
LOT Quantum Design	http://lot-qd.de
Lucid Vision Labs	www.thinklucid.com
Lumasense Technology	www.lumasenseinc.com
Luster LightVision Tech	www.lusterinc.com
MAK Bildtechnik	www.mak-bildtechnik.de
Matrix Vision	www.matrix-vision.de
MaxxVision	www.maxxvision.com
Menzel Vision and Robotics	www.menzelab.com
Mega Phase Industrial Inspection Technology	www.mega-phase.cn
Mesa Imaging	www.mesa-imaging.ch
MG Optical Solutions	www.mgopticalsolutions.com
Micro-Epsilon	www.micro-epsilon.com
Microsystems	www.microsystems.it
Mikromak Service	www.mikromak.com
Mikrotron	www.mikrotron.de
Mitsubishi Electric	www.mitsubishielectric.com

MsiVision	www.msivision.com
NAC	www.nacinc.de
Narragansett Imaging	www.nimaging.com
National Instruments	www.ni.com
NED	www.ned-sensor.co.jp
NET	www.net-gmbh.com
NeuPro Solutions	www.neupro-solutions.com
New Imaging Technologies	www.new-imaging-technologies.com
Notavis	www.notavis.com
NTI	www.nti-measure.com
Odem Technologies	www.odem.co.il
Olympus	www.olympus-europa.com
Omron Microscan Systems	www.microscan.com
Omron	www.industrial.omron.de
ON Semiconductor	www.onsemi.com
Opto Fidelity	www.optofidelity.com
Opto Sonderbedarf	www.opto.de
Optrima	www.optrima.com
Optris	www.optris.de
Optronis	www.optronis.com
Orbis	www.orbis.eu
Panasonic Electric Works	www.panasonic-electric-works.de
Parameter	www.parameter.se
PCO	www.pco.de
Pentacon	www.pentacon.de
PerkinElmer Optoelectronics	www.perkinelmer.com
Phaer	www.phaer.be
Philips	www.apptech.philips.com/vision
Photonfocus	www.photonfocus.com
Photron	www.photron.com
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
Pieper	www.pieper-video.de
Pixelink	www.pixelink.com
PMDTec	www.pmdtec.com
Polytec	www.polytec.de/bv
Precitec	www.precitec.ch
Premier Electronics	www.premierelect.co.uk
Princeton Instruments	www.princetoninstruments.com
Prophesee	www.prophesee.ai

Proxitronic	www.proxitronic.com
Qualimatest	www.qmt.ch
Quest Innovations	www.quest-innovations.com
Rad-icon Imaging	www.rad-icon.com
Rauscher	www.rauscher.de
Redlake	www.redlake.com
RH Engineering	www.rhengineering.de
Ricoh International B.V. - German Branch	www.ricoh-iosd.eu
Roper Scientific	www.roperscientific.de
Rubroeder	www.rubroeder.de
Salvador Imaging	www.salvadorimaging.com
Schael-Optik	www.schael-optik.de
Schäfter + Kirchhoff	www.sukhamburg.de
Schmachtl	www.schmachtl.at
SDT - Dr. Seitner	www.sdt-seitner.com
Second2None	www.visiondragon.com
Secube	www.secube.co.kr
Sedeco Vision Components	www.sedeco.nl
Seiwa Optical	www.seiwaopt.co.jp
Sensor to Image	www.sensor-to-image.de
Sensors Unlimited	www.sensorsinc.com
Sentech	www.sentech.co.jp
Sglux	www.sglux.com
Sharp Microelectronics	www.sharpsme.com
SKS Vision Systems	www.visionsystems.fi
Slomotec	www.slomotec.de
Smartek	www.smartek.hr
Smartray	www.smartray.de
Soliton Technologies	www.solitontech.com
Sony	www.pro.sony.eu/vision
Stemmer Imaging	www.stemmer-imaging.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenu.de
Sugitoh	www.sugitoh.jp
SVS Vistek	www.svs-vistek.com
Symco	www.symco.co.jp
Systematic Vision	www.systematicvision.com
Tattile	www.tattile.com
Tekno Optik	www.teknooptik.se
Tekstar Optical	www.tekstaroptical.com
Teledyne Dalsa	www.teledynedalsa.com

Teledyne e2v	www.teledyne-e2v.com
Teledyne Lumenera	www.teledynelumenera.com
The Imaging Source	www.theimagingnsources.com
Thermosensorik	www.thermosensorik.de
Tichawa Vision	www.tichawa.de
Toshiba Teli	www.toshiba-teli.co.jp
Toshiba	www.toshiba.ch
TriDiCam	www.tridicam.de
TVI Vision	www.tvivision.com
Unibrain	www.unibrain.com
VDS Vosskühler	www.vdsvossk.de
Vega Technology Group	www.vegatcgroup.com
Vialux	www.vialux.de
Vicon Motion Systems	www.vicon.com
Videology Imaging Solutions	www.videologyinc.com
Videor Technical	www.videor.com
Vidisys	www.vidisys.de
Vieworks	www.vieworks.com
Visicontrol	www.visicontrol.com
Visiolaser	www.vannier-photelec.fr/visiolaser
Vision & Control	www.vision-control.com
Vision Components	www.vision-components.com
Vision Research	www.visionresearch.com
Vision Tools	www.vision-tools.com
Visiosens	www.visiosens.de
Vistas	www.vistas-gmbh.de
Vitronic	www.vitronic.com
Vizaar	www.vizaar.de
VKT	www.vkt.de
V-Optics	www.v-optics.fr
VRmagic	www.vrmagic.com
Weiss Imaging and Solutions	www.weiss-imaging.de
Wenglor Sensoric	www.wenglor.com
Werner Nophut	www.dsam.de
Xenics	www.xenics.com
Ximea	www.ximea.com
Zertrox	www.zertrox.de
Zhejiang Huaray Technology	www.huaraytech.com

Consulting, Marketing, Education & Other Services

AIA Automated Imaging Association	www.machinevisiononline.org
Alfavision	www.alfavision.de
Arvoo Imaging Products	www.arvoo.com
AS Thermographie	www.as-thermografie.de
Asentics	www.asentics.de
CMES - Chinese Mechanical Engineering Society	www.cmes.org
Cmos Vision	www.cmosvision.com
CMOSIS	www.cmosis.com
Cognex	www.cognex.com
Collischon Optik-Design	www.mikro-optik.de
CSEM	www.csem.ch
CTMV	www.ctmv.de
Datapixel	www.datapixel.com
De Man Industrie-Automation	www.deman.de
Digital West Imaging	www.highspeedvideos.com
Duwe 3D	www.duwe-3d.de
EMVA European Machine Vision Association	www.emva.org
Entner Electronics	www.entner-electronics.com
Envision	www.envision.co.kr
Erhard + Leimer	www.erhardt-leimer.com
Farbmessung Schröder	www.farbmessung.com
FiberVision	www.fibervision.de
Framos	www.framos.eu
Fraunhofer Allianz Vision	www.vision.fraunhofer.de
G4 Technology	www.g4.com.tw
Gesellschaft für Bild- und Signalverarbeitung (GBS)	www.gbs-ilmenau.de
GFal	www.gfai.de
IDS	www.ids-imaging.com
Imaging Lab	www.imaginglab.it
Impuls	www.impuls-imaging.com
INB Vision	www.inb-vision.com
Infaimon	www.infaimon.com
InRay Solutions	www.inrays.com
Inspect	www.inspect-online.com
Irida Labs	www.irdalabs.gr
IS Imaging Solutions	www.imaging-solutions.de
IVAN	www.feda.nl
Dr.-Ing. Jänchen Business Development	www.jaenchen-bd.com

JIIA Japan Industrial Imaging Association	www.jiia.org
Joanneum Research	www.joanneum.at
Kappa opto-electronics	www.kappa.de
Landesmesse Stuttgart	www.vision-fair.de
Lincoln Laser Company	www.lincolnlaser.com
Messe München	www.messe-muenchen.de
Michigan Metrology	www.michmet.com
MsiVision	www.msivision.com
Neurocheck	www.neurocheck.com
Norman N. Axelrod Associates	www.axelrodassociates.com
NTI	www.nti-measure.com
Omron	www.industrial.omron.de
Optical Research Associates	www.opticalres.com
Opto	www.opto.de
Opto Fidelity	www.optofidelity.com
P.E. Schall	www.schall-messen.de
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
Polytec	www.polytec.de/bv
Rubroeder	www.rubroeder.de
Sensor to Image	www.sensor-to-image.de
SmartSurv	www.smartsurv.de
Solving3D	www.solving3d.de
SPG Data 3D	www.spgdata3d.com
Stemmer Imaging	www.stemmer-imaging.com
Strategema Frank Olschewski Consulting	www.stra-te-gema.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de
Supercomputing Systems	www.scs-vision.ch
SVS Vistek	www.svs-vistek.com
Sympo	www.symop.com
Systematic Vision	www.systematicvision.com
Ukiva	www.ukiva.org
University of Applied Sciences	www.fbmn.h-da.de
Univision	www.univision.it
Van de Loosdrecht Machine Vision	www.vdlmv.nl
VDMA Industrielle Bildverarbeitung	www.vdma.org/vision
Vega Technology Group	www.vegatcgroup.com
Vision & Control	www.vision-control.com
Vision Club of Finland	www.automaatioseura.fi
Vision Machines	www.vision-machines.com

Vision Tools	www.vision-tools.com
Vision Ventures	www.vision-ventures.eu
Visionlink	www.visionlink.it
Vitronic	www.vitronic.com

Frame Grabber

Active Silicon	www.activesilicon.com
Adlink	www.adlinktech.eu
Advantech Europe	www.advantech.eu
Alacron	www.alacron.com
Alrad Imaging	www.alrad.co.uk
Arvoo Imaging Products	www.arvoo.com
Baumer	www.baumer.com
Beijing Microview	www.microview.com.cn
BitFlow	www.bitflow.com
Bock Optronics	www.bockoptronics.ca
China Daheng Group	www.daheng-image.com
Cognex	www.cognex.com
Cosyco	www.cosyco.de
Cyberoptics Semiconductor	www.imagenation.com
EDT	www.edt.com
EHD imaging	www.ehd.de
Ellips	www.ellips.nl
Eltec Elektronik	www.eltec.com
Epix	www.epixinc.com
Fabrimex Systems	www.fabrimex-systems.ch
Fast	www.fast-corp.co.jp
Framos	www.framos.eu
G4 Technology	www.g4.com.tw
Gidel	www.gidel.com
HaSoTec	www.hasotec.com
IDS	www.ids-imaging.com
Image House	www.imagehouse.dk
Image S	www.imagesrl.com
Imaging Solutions Group	www.isgcameras.com
Imperx	www.imperx.com

VMT	www.vmt-gmbh.com
Wenglor Sensoric	www.wenglor.com
Zertrox	www.zertrox.de

Infaimon	www.infaimon.com
IS Imaging Solutions	www.imaging-solutions.de
Isra Vision	www.isravision.com
Japan F.A. Systems	www.jfas.co.jp
Karlheinz Hinze Optoengineering	www.hinze-opto.de
Kvant	www.kvant.sk
Lambda Photometrics	www.lambdaphoto.co.uk
Leutron Vision	www.leutron.com
Luster LightVision Tech	www.lusterinc.com
Matrix Vision	www.matrix-vision.de
Matrox Imaging	www.matrox.com/imaging
MaxxVision	www.maxxvision.com
Menzel Vision and Robotics	www.menzelab.com
Microsystems	www.microsystems.it
Mikrotron	www.mikrotron.de
MsiVision	www.msivision.com
National Instruments	www.ni.com
Odem Technologies	www.odem.co.il
Omron Microscan Systems	www.microscan.com
Orbis	www.orbis.eu
Parameter	www.parameter.se
Phaer	www.phaer.be
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
Polytec	www.polytec.de/bv
Premier Electronics	www.premierelect.co.uk
Qualimatest	www.qmt.ch
Rauscher	www.rauscher.de
Schael-Optik	www.schael-optik.de
Schäfer+Kirchhoff	www.sukhamburg.de

Schmachtl	www.schmachtl.at
Second2None	www.visiondragon.com
Sensor to Image	www.sensor-to-image.de
Silicon Software	www.silicon-software.de
Stemmer Imaging	www.stemmer-imaging.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de
Sundance Multiprocessor Technology	www.sundance.com
SVS Vistek	www.svs-vistek.com
Symco	www.symco.co.jp
Systematic Vision	www.systematicvision.com

Teledyne Dalsa	www.teledynedalsa.com
The Imaging Source	www.theimagingnsources.com
Videology Imaging Solutions	www.videologyinc.com
Vidisys	www.vidisys.de
Vision Tools	www.vision-tools.com
Visionlink	www.visionlink.it
Vistek	www.vistekas.com
Weiss Imaging and Solutions	www.weiss-imaging.de

ILLUMINATION & LIGHTING SYSTEMS

ABW	www.abw-3d.de
Acal BFi Germany	www.bfiophtilas.com
Advanced Illumination	www.advancedillumination.com
Allison Park Group	www.apgvision.com
Alrad Imaging	www.alrad.co.uk
AutoVimation	www.autovimation.com
Balluff	www.balluff.com
Baumer	www.baumer.com
Bock Optronics	www.bockoptronics.ca
Büchner Lichtsysteme	www.buechner-lichtsysteme.de
Cavitar	www.cavitar.com
CCS Europe	www.ccs-grp.com
Ceres Vision	www.ceresvision.de
Chromasens	www.chromasens.de
Cognex	www.cognex.com
Coherent	www.coherent.com
Collischon Optik-Design	www.mikro-optik.de
DCM Systemes	www.dcmsystemes.com
Dedo Weigert	www.dedoweigertfilm.de
Digital West Imaging	www.highspeedvideos.com

Edmund Optics	www.edmundoptics.de
Effilux	www.effilux.fr
Erhard + Leimer	www.erhardt-leimer.com
Fabrimex Systems	www.fabrimex-systems.ch
Falcon Illumination MV	www.falcon-illumination.de
Faseroptik Henning	www.faseroptik-henning.de
Fiberoptics Technology	www.fiberoptix.com
FiberVision	www.fibervision.de
Finger	www.finger-kg.de
Framos	www.framos.eu
Frankfurt Laser Company	www.frlaserco.com
FSI Technologies	www.fsinet.com
G4 Technology	www.g4.com.tw
Gardasoft Vision	www.gardasoft.com
GPP Chemnitz	www.gppc.de
Hamamatsu Photonics	www.hamamatsu.com
Helmut Hund	www.hund.de
Hema	www.hema.de
Herbert Waldmann	www.waldmann.com
IB/E Optics	www.ibe-optics.com

Ifm electronic	www.ifm.com
IiM	www.iimag.de
ILEE	www.ilee.ch
Image House	www.imagehouse.dk
Image S	www.imagessrl.com
Infaimon	www.infaimon.com
Innomiles International	www.innomiles.com
Insensiv	www.insensiv.de
IS Imaging Solutions	www.imaging-solutions.de
ISVI	www.isvi-corp.com
Japan F.A. Systems	www.jfas.co.jp
Jenoptik Laser, Optik, Systeme	www.jenoptik-los.de
Jos. Schneider Optische Werke	www.schneiderindustrial-optics.com
Karlheinz Hinze Optoengineering	www.hinze-opto.de
Keyence	www.keyence.de
Klastech	www.klastech.com
Klughammer	http://kms-e.de
Kvant	www.kvant.sk
Lambda Photometrics	www.lambdaphoto.co.uk
Laser 2000	www.laser2000.de
Laser Components	www.lasercomponents.com
LAT elektronik	www.latab.se
LDD Trading Associates	www.lddligh.com
Leistungselektronik Jena	www.lej.de
Leitner Industrial Endoscopy	www.leitner-efer.de
Leutron Vision	www.leutron.com
LMI Technologies	www.lmi3d.com
LOT Quantum Design	http://lot-qd.de
Luster LightVision Tech	www.lusterinc.com
Matrix Vision	www.matrix-vision.de
MaxxVision	www.maxxvision.com
Menzel Vision and Robotics	www.menzelab.com
Metaphase Technologies	www.metaphase-tech.com
MG Optical Solutions	www.mgopticalsolutions.com
Microsystems	www.microsystems.it
Moritex	www.moritex.com
MsiVision	www.msivision.com
MTD	www.mtd-light.com
Myutron	www.myutron.com
Nacacue	www.nacacue.com
NET	www.net-.com
NeuPro Solutions	www.neupro-solutions.com

Odem Technologies	www.odem.co.il
Olympus	www.olympus-europa.com
Omicron Laserage	www.omicron-laser.de
Omron Microscan Systems	www.microscan.com
Omron	www.industrial.omron.de
Opto	www.opto.de
Opto Engineering	www.opto-engineering.com
Opto Precision	www.optoprecision.de
Optometron	www.optometron.de
OptoPolymer	www.optopolymer.de
Orbis	www.orbis.eu
Parameter	www.parameter.se
PerkinElmer Optoelectronics	www.perkinelmer.com
Phaer	www.phaer.be
Phlox	www.phlox-gc.com
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
Planistar Lichttechnik	www.planistar.de
POG Präzisionsoptik Gera	www.pog.eu
Polytec	www.polytec.de/bv
Power Technology	www.powertechnology.com
Profactor	www.profactor.at
Qualimatest	www.qmt.ch
Quioptiq	www.quioptiq.de
Rauscher	www.rauscher.de
RH Engineering	www.rhengineering.de
Rheintacho Messtechnik	www.rheintacho.com
Schael-Optik	www.schael-optik.de
Schäfter + Kirchhoff	www.sukhamburg.de
Schmachtl	www.schmachtl.at
Schott Lighting and Imaging	www.schott.com
Second2None	www.visiondragon.com
Sedeco Vision Components	www.sedeco.nl
Seiwa Optical	www.seiwaopt.co.jp
Sharp Microelectronics	www.sharpsme.com
Sill Optics	www.silloptics.de
Smart Vision Lights	www.smartvisionlights.com
Smartek Vision	www.smartekvision.com
Soliton Technologies	www.solitontech.com
Special Application Products	www.sapltd.co.uk
Spectrum Illumination	www.spectrumillumination.com
Stemmer Imaging	www.stemmer-imaging.com

StockerYale	www.stockeryale.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de
SVS Vistek	www.svs-vistek.com
Symco	www.symco.co.jp
Tecin	www.tecin.de
Tekno Optik	www.teknooptik.se
Tema	www.temavisio.com
The Imaging Source	www.theimagingnsorce.com
Univision	www.univision.it
V Cubed	www.vcubed.co.uk
Vialux	www.vialux.de
Visicontrol	www.visicontrol.com

Visiolaser	www.vannier-photelec.fr/visiolaser
Vision & Control	www.vision-control.com
Vision Light Tech	www.visionlighttech.com
Vision Tools	www.vision-tools.com
Visionlink	www.visionlink.it
Visitool	www.visitool.de
Vistas	www.vistas-gmbh.de
Volpi	www.volpi.ch
VS Technology	www.vst.co.jp
Weiss Imaging and Solutions	www.weiss-imaging.de
Wenglor Sensoric	www.wenglor.com
Zertrox	www.zertrox.de

Microscopes, Endoscopes & Equipment

Alrad Imaging	www.alrad.co.uk
AMS Technologies	www.amstechnologies.com
Andor Technology	www.andor.com
Asylum Research	www.asylumresearch.com
Bock Optronics	www.bockoptronics.ca
Breitmeier Messtechnik	www.breitmeier.de
Carl Zeiss Microimaging	www.zeiss.de/microscopy
Deben UK	www.deben.co.uk
Dr. Heinrich Schneider Messtechnik	www.dr-schneider.de
Edmund Optics	www.edmundoptics.de
EHD Imaging	www.ehd.de
Fei Company	www.feicom.com
Fort SA	www.fort-fr.com
FRT Fries Research & Technology	www.frt-gmbh.com
G4 Technology	www.g4.com.tw
Heliotis	www.heliotis.ch
Helmut Hund	www.hund.de
Hipp Endoskop Service	www.hipp-endoskopservice.com

Horn Imaging	www.horn-imaging.de
Infaimon	www.infaimon.com
Infinity Photo-Optical	www.infinity-usa.com
Karl Storz	www.karlstorz.com
Karlheinz Hinze Optoengineering	www.hinze-opto.de
Kdorf Automation	www.kdorf.de
Keyence	www.keyence.de
Klughammer	www.klughammer.de
Kvant	www.kvant.sk
Leica Microsystems	www.leica-microsystems.com
Leitner Industrial Endoscopy	www.leitner-efer.de
LOT Quantum Design	http://lot-qd.de
MBR	www.mbr-gmbh.com
Micos	www.micos.ws
Micro-Epsilon	www.elrotec.com
Mikroskoptechnik Rathenow	www.askania.de
Mitutoyo	www.mitutoyo.de
Moritex	www.moritex.com

MsiVision	www.msivision.com
NanoFocus	www.nanofocus.de
Nanosurf	www.nanosurf.com
Nikon	www.nikoninstruments.eu
Olympus	www.olympus-europa.com
Opto	www.opto.de
OptoMess	www.optomess.de
Optometron	www.optometron.de
Optoprim	www.optoprim.de
Oxford Instruments	www.oxford-instruments.com
Panasonic	http://business.panasonic.co.uk/imv
PCE Power Control	www.pce-powercontrol.de
Physik Instrumente	www.pi.ws
Pi4_robotics	www.pi4.de
Pro Design Electronic	www.prodesign-europe.com
Richard Wolf	www.richard-wolf.com

Rubroeder	www.rubroeder.de
Schael-Optik	www.schael-optik.de
Schäfer Technologie	www.schaefer-tec.com
Seiwa Optical	www.seiwaopt.co.jp
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de
Tecin	www.tecin.de
Tekno Optik	www.teknooptik.se
Thermosensorik	www.thermosensorik.de
Vega Technology Group	www.vegatcgroup.com
Vision Engineering	www.visioneng.de
Visitool	www.visitool.de
Walter Uhl	www.walteruhl.de
Weiss Imaging and Solutions	www.weiss-imaging.de
Werth Messtechnik	www.werthmesstechnik.de
Wild	www.wild.at

Optical Metrology

3D Shape	www.3d-shape.com
Alicona Imaging	www.alicon.com
Allsens Messtechnik	www.allsens.de
Ametek	www.ametek.de
AMS Technologies	www.amstechnologies.com
Andor Technology	www.andor.com
Applied Electro-Optics	www.aeousa.com
Applied Scintillation Technologies	www.scintacor.com
Armstrong Optical	www.armstrongoptical.co.uk
Avantes	www.avantes.com
Benteler Maschinenbau	www.benteler.de
Bentham Instruments	www.bentham.co.uk
Berliner Glas Gruppe	www.berlinglas.de
Breitmeier Messtechnik	www.breitmeier.de
BST eltomat International	www.bst-international.com
BST International	www.bst-international.com
Carl Zeiss IMT	www.zeiss.de/Messtechnik
Carl Zeiss Microimaging	www.zeiss.de/microscopy

Carl Zeiss Optotechnik	optotechnik.zeiss.com
Chunghwa Leading Photonics Tech (CLPT)	www.clpt.com.tw
CMC Kuhnke	www.cmc-kuhnke.de
ColorLite	www.colorlite.de
Confovis	www.confovis.com
Creaform Deutschland	www.creaform3d.com
Dantec Dynamics	www.dantecdynamics.com
Datapixel	www.datapixel.com
Digital Surf	www.digitalsurf.com
Dr. Heinrich Schneider Messtechnik	www.dr-schneider.de
Dr. Wehrhahn Messsysteme	www.drwehrhahn.com
Dyoptyka	www.dyoptyka.com
EHD Imaging	www.ehd.de
Electronic Systems	www.electronicssystem.it
ElektroPhysik Dr. Steingroever	www.elektrophysik.com
EVK DI Kerschhagl	www.evk.biz

Farbmessung Schröder	www.farbmessung.com
Faro	www.faro.com
FJW Optical Systems	www.findrscope.com
Fraunhofer IFF	www.mpt.iff.fraunhofer.de
FRT Fries Research & Technology	www.frt-gmbh.com
G4 Technology	www.g4.com.tw
GE Sensing & Inspection Technologies	www.gemeasurement.com
GOM	www.gom.com
Hamamatsu Photonics	www.hamamatsu.com
HD Vision Systems	www.hdvvisionsystems.com
Heitronics Infrarot Messtechnik	www.heitronics.com
Hexagon Manufacturing Intelligence	www.hexagonmi.com
Hipp Endoskop Service	www.hipp-endoskopservice.com
IB/E Optics	www.ibe-optics.com
Ico Data	www.icodata.de
Ideko	www.ideko.es
iiM	www.iimag.de
ILEE	www.ilee.ch
Imetric	www.imetric.com
Infaimon	www.infaimon.com
Infinity Photo-Optical	www.infinity-usa.com
InfraTec	www.infratec.de
Innowep	www.innowep.com
InSystems Automation	www.insystems.de
Isi-sys	www.isi-sys.com
Jenoptik	www.jenoptik.de
Jos. Schneider Optische Werke	www.schneiderkreuznach.com
Kleiber Infrared	www.kleiberinfrared.com
Konica Minolta	www.konicaminolta.eu
Kreon Technologies	www.kreon3d.com
Lambda Photometrics	www.lambdaphoto.co.uk
LamTech	www.lamtech.de
Land Instruments	www.landinst.com
LAP	www.lap-laser.com
Laser 2000	www.laser2000.de
Laser Components	www.lasercomponents.com
Laser Quantum	www.laserquantum.com
LayTec	www.laytec.de
LDV Systeme	www.ldv-systeme.de
Leitner Industrial Endoscopy	www.leitner-efer.de
Limess	www.limess.com
LOT Quantum Design	http://lot-qd.de

Mahr	www.mahr.de
Meta Vision Systems	www.meta-mvs.co.uk
Metris	www.metris.com
MG Optical Solutions	www.mgopticalsolutions.com
Michigan Metrology	www.michmet.com
Mikropack	www.mikropack.de
Mirco-Epsilon Eltrotec	www.eltrotec.com
Mitutoyo	www.mitutoyo.de
Moeller-Wedel Optical	www.moeller-wedel-optical.com
Molenaar Optics	www.molenaar-optics.com
Moritex	www.moritex.com
M-u-t	www.mut-group.com
Mycrona	www.mycrona.de
NanoFocus	www.nanofocus.de
Nikon Metrology	www.nikonmetrology.com
Novacam Technologies Inc.	www.novacam.com
NTI	www.nti-measure.com
Nub3d	www.nub3d.com
Odem Technologies	www.odem.co.il
OGP Messtechnik	www.ogpmesstechnik.de
Olympus	www.olympus-europa.com
Opsira	www.opsira.de
Optimet Optical Metrology	www.optimet.com
Opto	www.opto.de
Opto Fidelity	www.optofidelity.com
Opto Precision	www.optoprecision.de
OptoMess	www.optomess.de
Optometron	www.optometron.de
OptoPolymer	www.optopolymer.de
Optoprim	www.optoprim.de
OptoSurf	www.optosurf.com
Optris	www.optris.de
Orbis	www.orbis.eu
Oxford Instruments	www.oxford-instruments.com
Parameter	www.parameter.se
Pentacon	www.pentacon.de
Perceptron	www.perceptron.com
PerkinElmer Optoelectronics	www.perkinelmer.com
Phaer	www.phaer.be
Phynix	www.phynix.de
Pi4_robotics	www.pi4.de
Plasmo Industrietechnik	www.plasmo.eu

Polygon	www.polygon-technology.de
Polytec	www.polytec.de/bv
Precitec Optronik	www.precitec-optronik.de
Premosys	www.premosys.com
Princeton Instruments	www.princetoninstruments.com
Proxitronic	www.proxitronic.com
Quest Innovations	www.quest-innovations.com
Raytek	www.raytek.de
Rheintacho Messtechnik	www.rheintacho.com
Richard Wolf	www.richard-wolf.com
Roper Scientific	www.roperscientific.de
Rudolph Technologies	www.rudolphtech.com
Schäfer Technologie	www.schaefer-tec.com
Schäfer + Kirchhoff	www.sukhamburg.de
Sensor Instruments	www.sensorinstruments.de
Sensors Unlimited	www.sensorsinc.com
SGM Schut	www.schut.com
Shape Drive	www.shape-drive.com
Sick	www.sick.com
SIOS Meßtechnik	www.sios.de
SKS Vision Systems	www.visionsystems.fi
Soliton	www.soliton-gmbh.de
Specim Spectral Imaging	www.specim.fi
Stiefelmayer	www.stiefelmayer.de
STIL	www.stilsa.com
SynView	www.synview.com

Taylor Hobson	www.taylor-hobson.com
Tec5	www.tec5.com
TechnoTeam	www.technoteam.de
Tekno Optik	www.teknootoptik.se
Topometric	www.topometric.net
Tordivel	www.scorpionvision.com
Ulis	www.ulis-ir.com
Vialux	www.vialux.de
Videometer	www.videometer.com
Visiolaser	www.vannier-photelec.fr/visiolaser
Vision Engineering	www.visioneng.de
Vision Machines	www.vision-machines.com
ViZaar	www.vizaar.de
Volform	www.volform.se
Wente/Thiedig	www.wente-thiedig.de
Werth Messtechnik	www.werthmesstechnik.de
Wild	www.wild.at
Xenics	www.xenics.com
X-Rite	www.xrite.com
Yxlon International	www.yxlon.com
Z-Laser	www.z-laser.com
Zwick	www.zwick.de
Zygo BU der Ametek Germany	www.zygo.de

Optics

Acal BFi Germany	www.bfiophtilas.com
AHF Analysentechnik	www.ahf.de
Allied Vision Technologies	www.alliedvisiontec.com
Alrad Imaging	www.alrad.co.uk
AMS Technologies	www.amstechnologies.com
Anteryon	www.anteryon.com
Armstrong Optical	www.armstrongoptical.co.uk
Azure Photonics	www.azurephotonics.com

B & M Optik	www.bm-optik.de
Basler	www.baslerweb.com
Baumer	www.baumer.com
Berliner Glas Gruppe	www.berlinglas.com
Birger Engineering	www.birger.com
BK Interferenzoptik	www.interferenzoptik.de
Bock Optronics	www.bockoptronics.ca
Carl Zeiss IMT	www.zeiss.de/messtechnik

Carl Zeiss Microimaging	www.zeiss.de/microscopy
Carl Zeiss	www.zeiss.com/lenses4industry
CBC Deutschland	www.cbc-de.com
China Daheng Group Inc.	www.daheng-image.com
Collischon Optik-Design	www.mikro-optik.de
Cosyco	www.cosyco.de
Deposition Sciences	www.depsci.com
Docter Optics	www.docteroptics.com
Edmund Optics	www.edmundoptics.de
EHD imaging	www.ehd.de
Eureca Messtechnik	www.eureca.de
Fabrimex Systems	www.fabrimex-systems.ch
FiberVision	www.fibervision.de
Finger	www.finger-kg.de
Fisba Optik	www.fisba.ch
Flir Advanced Thermal Solutions	www.flir.com/mv
Framos	www.framos.eu
FRT Fries Research & Technology	www.frt-gmbh.com
Fujifilm	www.fujifilm.eu
G4 Technology	www.g4.com.tw
Goyo Optical	www.gyooptical.com
Helmut Hund	www.hund.de
Holoeye Photonics	www.holoeye.com
IB/E Optics	www.ibe-optics.com
IDS	www.ids-imaging.com
Ifm Electronic	www.ifm.com
iIM	www.iimag.de
Image House	www.imagehouse.dk
Image S	www.imagessrl.com
IMT	www.imtag.ch
Infaimon	www.infaimon.com
Ircam	www.ircam.de
IS Imaging Solutions	www.imaging-solutions.de
ISVI	www.isvi-corp.com
Japan F.A. Systems	www.jfas.co.jp
Jenoptik	www.jenoptik.de
Jos. Schneider Optische Werke	www.schneiderkreuznach.com
Karlheinz Hinze Optoengineering	www.hinze-opto.de
KeeKoon Electronics	www.keekoon.com
Keyence	www.keyence.de
Kowa Europe	www.kowa.eu
Kvant	www.kvant.sk

Lambda Photometrics	www.lambdaphoto.co.uk
Laser 2000	www.laser2000.de
Laser Components	www.lasercomponents.com
Leading-Tech Laser	www.leading-techlaser.com
Lensation	www.lensation.de
Leoni	www.leoni-fiber-optics.com
Lincoln Laser Company	www.lincolnlaser.com
LMI Technologies	www.lmi3d.com
LOT Quantum Design	http://lot-qd.de
Lucid Vision Labs	www.thinklucid.com
Luster LightVision Tech	www.lusterinc.com
Matrix Vision	www.matrix-vision.de
MaxxVision	www.maxxvision.com
Menzel Vision and Robotics	www.menzelab.com
Meuser Optik	www.meuser-optik.com
MG Optical Solutions	www.mgopticalsolutions.com
Micos	www.micos.ws
Micro-Epsilon	www.eltrotec.com
Microsystems	www.microsystems.it
Midwest Optical Systems	www.midopt.com
Moeller-Wedel Optical	www.moeller-wedel-optical.com
Molenaar Optics	www.molenaar-optics.com
Moritex	www.moritex.com
MsiVision	www.msivision.com
Myutron	www.myutron.com
Nacacue	www.nacacue.com
Navitar	www.navitar.com
NET	www.net-gmbh.com
NeuPro Solutions	www.neupro-solutions.com
Notavis	www.notavis.com
Odem Technologies	www.odem.co.il
Olympus	www.olympus-europa.com
Omron	www.industrial.omron.de
Optec	www.optec.eu
Optics Balzers	www.opticsbalzers.com
Opto	www.opto.de
Opto Engineering	www.opto-engineering.com
Opto Precision	www.optoprecision.de
Optometron	www.optometron.de
Orbis	www.orbis.eu
Parameter	www.parameter.se
Phaer	www.phaer.be

Photonic Products	www.photonic-products.com
Pi4_robotics	www.pi4.de
POG Präzisionsoptik Gera	www.pog.eu
Polytec	www.polytec.de/bv
Profactor	www.profactor.at
Qioptiq	www.qioptiq.de
Qualimatec	www.qmt.ch
Rauscher	www.rauscher.de
Resolve Optics	www.resolveoptics.com
RH Engineering	www.rhengineering.de
Ricoh International B.V. - German Branch	www.ricoh-iosd.eu
Schael-Optik	www.schael-optik.de
Schäfter + Kirchhoff	www.sukhamburg.de
Schmachtl	www.schmachtl.at
Schott Lighting and Imaging	www.schott.com
Second2None	www.visiondragon.com
Sedeco Vision Components	www.sedeco.nl
Seiwa Optical	www.seiwaopt.co.jp
Sill Optics	www.silloptics.de
Space	www.spacecom.co.jp
Spectros	www.spectros.ch
Spectrum Illumination	www.spectrumillumination.com
Stemmer Imaging	www.stemmer-imaging.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de

Sugitoh	www.sugitoh.jp
Sunex	www.sunex.com
SVS Vistek	www.svs-vistek.com
Sydor Optics	www.sydor.com
Symco	www.symco.co.jp
Tamron	www.tamron.de
Tekno Optik	www.teknooptik.se
Tekstar Optical	www.tekstaroptical.com
The Imaging Source	www.theimagingnsource.com
Thermosensorik	www.thermosensorik.de
Vega Technology Group	www.vegatcgroup.com
Videology Imaging Solutions	www.videologyinc.com
Videor Technical	www.videor.com
Vision & Control	www.vision-control.com
Vision Engineering	www.visioneng.de
Vision Light Tech	www.visionlighttech.com
Visitool	www.visitool.de
Volpi	www.volpi.ch
VS Technology	www.vst.co.jp
Weiss Imaging and Solutions	www.weiss-imaging.de
ZygoLOT	www.zygot.de

Processors, Interfaces, Cables, Peripherals

ABS	www.abs-jena.de
Active Silicon	www.activesilicon.com
Adaptive Vision	www.adaptive-vision.com
Adlink	www.adlinktech.eu
Aerotech	www.aerotech.com
Allied Vision Technologies	www.alliedvisiontec.com
Alysium-Tech	www.alysium-tech.com
AMS Technologies	www.amstechnologies.com

Andon Electronics	www.andonelect.com
Arvoo Imaging Products	www.arvoo.com
AutoVimation	www.autovimation.com
BAP Image Systems	www.bapimgsys.com
Baumer	www.baumer.com
Bock Optronics	www.bockoptronics.ca
Components Express	www.componentsexpress.com
D.SignT	www.dsignt.de

De Man Industrie-Automation	www.deman.de
EDT	www.edt.com
Eltec Elektronik	www.eltec.com
Epix	www.epixinc.com
Ernst & Engbring	www.eue-kabel.de
Evision Systems	www.evision-systems.de
Fabrimex Systems	www.fabrimex-systems.ch
FiberVision	www.fibervision.de
Framos	www.framos.eu
G4 Technology	www.g4.com.tw
Gidel	www.gidel.com
GigaLinx	www.gigalinx.net
HaSoTec	www.hasotec.com
Hema	www.hema.de
Hirakawa Hewtech	www.hewtech.co.jp
IDS	www.ids-imaging.com
Igus	www.igus.de
Image House	www.imagehouse.dk
Image S	www.imagesrl.com
Imaging Solutions Group	www.isgcameras.com
Infaimon	www.infaimon.com
Intercon1	www.intercon-1.com
JAI	www.jai.com
Japan F.A. Systems Corporation	www.jfas.co.jp
Lemo	www.lemo.com
Leoni	www.leoni-fiber-optics.com
LMI Technologies	www.lmi3d.com
Lucid Vision Labs	www.thinklucid.com
Luster LightVision Tech	www.lusterinc.com
Mad City Labs	www.madcitylabs.com
Matrix Vision	www.matrix-vision.de
Matrox Imaging	www.matrox.com/imaging
MaxxVision	www.maxxvision.com
MaZet	www.mazet.de
Menzel Vision and Robotics	www.menzelab.com
Micro-Epsilon	www.eltrotec.com
Micron	www.micron.com
Microsystems	www.microsystems.it
Mikrotron	www.mikrotron.de
Nacacue	www.nacacue.com
NET New Electronic Technology	www.net-gmbh.com
Newnex Technology	www.newnex.com

Northwire Technical Cable	www.northwire.com
Orbis	www.orbis.eu
Parameter	www.parameter.se
Phaer	www.phaer.be
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
Pleora Technologies	www.pleora.com
Pro Design Electronic	www.prodesign-europe.com
Schäfter+Kirchhoff	www.sukhamburg.de
Schmachtl	www.schmachtl.at
Seidenader	www.seidenader.de
Serview	www.serview.net
Sglux	www.sglux.com
Silicon Software	www.silicon-software.de
Stemmer Imaging	www.stemmer-imaging.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmeneau.de
Supercomputing Systems	www.scs-vision.ch
SVS Vistek	www.svs-vistek.com
Symco	www.symco.co.jp
Teledyne Dalsa	www.teledynedalsa.com
The Imaging Source	www.theimagingnsources.com
Thinklogical	www.thinklogical.com
Unibrain	www.unibrain.com
USBFireWire	www.usbfirewire.com
Vidisys	www.vidisys.de
Vision & Control	www.vision-control.com
Vision Tools	www.vision-tools.com
Vistas	www.vistas-gmbh.de
WIR Electronic	www.wir-electronic.de
Xilinx	www.xilinx.com
Ximea	www.ximea.com

R&D

Acal BFi Germany	www.bfiophtilas.com
Alfvision	www.alfvision.de
Alicona Imaging	www.alicon.com
Anafocus	www.anafocus.com
Austrian Institute of Technology	www.ait.ac.at
AutoVimation	www.autovimation.com
Cmos Vision	www.cmosvision.com
Cognex	www.cognex.com
Collischon Optik-Design	www.mikro-optik.de
Creaform Deutschland	www.creaform3d.com
CSEM	www.csem.ch
CTR Carinthian Tech Research	www.ctr.at
Cypress Semiconductor	www.cypress.com
De Man Industrie-Automation	www.deman.de
Department of Mechanical and Industrial Engineering (DIMI) of the University of Brescia	https://en.unibs.it/departments/mechanical-and-industrial-engineering
Docter Optics	www.docteroptics.com
Eltec Elektronik	www.eltec.com
Entner Electronics	www.entner-electronics.com
Erhard + Leimer	www.erhardt-leimer.com
FiberVision	www.fibervision.de
Flir Advanced Thermal Solutions	www.flir.com
Fraunhofer Allianz Vision	www.vision.fraunhofer.de
Fraunhofer IMS	www.ims.fraunhofer.de
FRT Fries Research & Technology	www.frt-gmbh.com
Gesellschaft für Bild- und Signalverarbeitung	www.gbs-ilmenau.de
Gevicam	www.gevicam.com
GFai	www.gfai.de
HaSoTec	www.hasotec.com
HCI at IWR Heidelberg University	hciweb.iwr.uni-heidelberg.de
Helion	www.helionvision.com
Ideko	www.ideko.es
IDS	www.ids-imaging.com
Imaging Lab	www.imaginglab.it
Impuls	www.impuls-imaging.com
IMS Chips	www.ims-chips.de
Infaimon	www.infaimon.com
Isomorph	www.isomorph.it
Joanneum Research	www.joanneum.at
Jos. Schneider Optische Werke	www.schneiderkreuznach.com
Kamera Werke Dresden	www.kwdo.de

Kappa opto-electronics	www.kappa.de
Lincoln Laser Company	www.lincolnlaser.com
LMI Technologies	www.lmi3d.com
Matrix Vision	www.matrix-vision.de
Mazet	www.mazet.de
Micro-Epsilon	www.eltrotec.com
Mikromak Service	www.mikromak.com
MsiVision	www.msivision.com
Norpix	www.norpix.com
Opto	www.opto.de
Panavision Imaging	www.panavisionimaging.com
PCO	www.pco.de
Photonfocus	www.photonfocus.com
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
Profactor	www.profactor.at
Schäfter + Kirchoff	www.sukhamburg.de
Sensor to Image	www.sensor-to-image.de
Smartsurv	www.smartsurv.de
SPG Data 3D	www.spgdata3d.com
SPIE	www.spieeurope.org
Stemmer Imaging	www.stemmer-imaging.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de
Tecnia	www.tecnialia.com
Tekno Optik	www.teknooptik.se
Tema	www.temavisio.com
Thermosensorik	www.thermosensorik.de
Tichawa Vision	www.tichawa.de
Tordivel	www.scorpionvision.com
University of Applied Sciences of the Grisons Chur – FHGR	www.fhgr.ch
Univision	www.univision.it
Vega Technology Group	www.vegatcgroup.com
Vicomtech	www.vicomtech.org
Vision & Control	www.vision-control.com
Vision Machines	www.vision-machines.com
Vision Tools	www.vision-tools.com
V-Research	www.v-research.at
Zertrox	www.zertrox.de

Software

A&B Software	www.ab-soft.com
ABW	www.abw-3d.de
Adaptive Vision	www.adaptive-vision.com
Advantech Europe	www.advantech.eu
Alditech	www.alditech.ru
Alfvision	www.alfvision.de
Alicona Imaging	www.alicon.com
Alliance Vision	www.alliancevision.com
Alrad Imaging	www.alrad.co.uk
AMS Technologies	www.amstechnologies.com
Andor Technology	www.andor.com
AOS Technologies	www.aostechnologies.com
Applied Electro-Optics	www.aeousa.com
Artray	www.artray.co.jp
Asentics	www.asentics.de
Attentra	www.attentra.de
Baumer	www.baumer.com
Cimetrix	www.cimetrix.com
Cognex	www.cognex.com
Cosyco	www.cosyco.de
Datapixel	www.datapixel.com
De Man Industrie-Automation	www.deman.de
Dhs Solutions	www.dhssolution.com
Digital Surf	www.digitalsurf.com
Duwe 3D	www.duwe-3d.de
Dynalog	www.dynalog-us.com
Ebs Automatisierte Thermographie und Systemtechnik	www.irpod.net
EHD Imaging	www.ehd.de
Eltec Elektronik	www.eltec.com
Energid	www.energid.com
Epix	www.epixinc.com
Erhard + Leimer	www.erhardt-leimer.com
Euresys	www.euresys.com
EVT Eye Vision Technology	www.evt-web.com
Fabrimex Systems	www.fabrimex-systems.ch
Fast	www.fast-corp.co.jp
FDS Research	www.fdsresearch.si
FiberVision	www.fibervision.de
Flir Advanced Thermal Solutions	www.flir.com
Framos	www.framos.eu

FSI Technologies	www.fsinet.com
G4 Technology	www.g4.com.tw
Gefasoft	www.gefasoft.com
Geomagic	www.geomagic.com
Gesellschaft für Bild- und Signalverarbeitung	www.gbs-ilmenau.de
Gevicam	www.gevicam.com
Goldlücke Ingenieurleistungen	www.giib.de
Hasotec	www.hasotec.com
Hexagon Manufacturing Intelligence	www.hexagonmi.com
IB/E Optics	www.ibe-optics.com
IDS	www.ids-imaging.com
iiM	www.iimag.de
Image House	www.imagehouse.dk
Image S	www.imagesrl.com
Imagic	www.imagic-imaging.com
Imaging Lab	www.imaginglab.it
Impuls	www.impuls-imaging.com
INB Vision	www.inb-vision.com
Industrial Vision Systems	www.industrialvision.co.uk
Infaimon	www.infaimon.com
Innomiles International	www.innomiles.com
Inray Solutions	www.inrays.com
In-situ	www.in-situ.de
Ircam	www.ircam.de
IS Imaging Solutions	www.imaging-solutions.de
Isomorph	www.isomorph.it
Isra Vision	www.isravision.com
IVS	www.industrialvision.co.uk
JAI	www.jai.com
Japan F.A. Systems	www.jfas.co.jp
Joanneum Research	www.joanneum.at
Kappa opto-electronics	www.kappa.de
Karlheinz Hinze Optoengineering	www.hinze-opto.de
Klughammer	www.klughammer.de
Kortiq	www.kortiq.com
Kvant	www.kvant.sk
Lambda Photometrics	www.lambdaphoto.co.uk
Lambda Research	www.lambdares.com
Leica Microsystems	www.leica-microsystems.com
Leutron Vision	www.leutron.com

LMI Technologies	www.lmi3d.com
Luster Lightvision Tech	www.lusterinc.com
Math & Tech Engineering	www.mathtech.eu
Matrix Vision	www.matrix-vision.de
Matrox Imaging	www.matrox.com/imaging
MaxxVision	www.maxxvision.com
Menzel Vision and Robotics	www.menzelab.com
Merz freeform.technologies	www.merz-technologies.com
Mettler Toledo Product Inspection	www.mt.com
Micro Epsilon	www.micro-epsilon.com
Microsystems	www.microsystems.it
Mikromak Service	www.mikromak.com
Mitutoyo	www.mitutoyo.de
Msivision	www.msivision.com
MVTec Software	www.mvtec.com
National Instruments	www.ni.com
Neogramm	www.neogramm.de
NET New Electronic Technology	www.net-gmbh.com
Neurocheck	www.neurocheck.com
Norpix	www.norpix.com
Notavis	www.notavis.com
Odem Technologies	www.odem.co.il
Olympus	www.olympus-europa.com
Omron Microscan Systems	www.microscan.com
Omron	www.industrial.omron.de
Optical Research Associates	www.opticalres.com
Optis	www.optis-world.com
Opto	www.opto.de
Optometron	www.optometron.de
Orbis	www.orbis.eu
Parameter	www.parameter.se
Photonfocus	www.photonfocus.com
Pi4_robotics	www.pi4.de
Pleora Technologies	www.pleora.com
Polytec	www.polytec.de/bv
Profactor	www.profactor.at
Qualimatest	www.qmt.ch
Rapidform	www.rapidform.com
Rauscher	www.rauscher.de
RH Engineering	www.rhengineering.de
Rubroeder	www.rubroeder.de
SAC	www.sac-vision.de

Schäfer+Kirchhoff	www.sukhamburg.de
Schmachtl	www.schmachtl.at
Second2None	www.visiondragon.com
Sedeco Vision Components	www.sedeco.nl
SensorDesk	www.sensordesk.com
Silicon Software	www.silicon-software.de
Simon IBV	www.simon-ibv.de
SmartSurv	www.smartsurv.de
SPG Data 3D	www.spgdata3d.com
Stemmer Imaging	www.stemmer-imaging.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de
Sualab	www.sualab.com
Supercomputing Systems	www.scs-vision.ch
SVS Vistek	www.svs-vistek.com
Symco	www.symco.co.jp
Systematic Vision	www.systematicvision.com
Tekno Optik	www.teknooptik.se
Teledyne Dalsa	www.teledynedalsa.com
Tema	www.temavisio.com
The Imaging Source	www.theimagingnsources.com
The Mathworks	www.mathworks.com
Thermosensorik	www.thermosensorik.de
Tordivel	www.scorpionvision.com
Trivision	www.trivision.dk
TYZX	www.tyzz.com
Unique Vision	www.unique-vision.net
Univision	www.univision.it
Van de Loosdrecht Machine Vision	www.vdlmv.nl
Vega Technology Group	www.vegatcgroup.com
Visicontrol	www.visicontrol.com
Visiolaser	www.vannier-photelec.fr/visiolaser
Vision & Control	www.vision-control.com
Vision Components	www.vision-components.com
Vision Machines	www.vision-machines.com
Vision Tools	www.vision-tools.com
Visionlink	www.visionlink.it
Vitronic	www.vitronic.com
Vizzion	www.vizzion.com
Weiss Imaging and Solutions	www.weiss-imaging.de
Wenzel	www.wenzel-group.com
X-Rite	www.xrite.com
Zertrox	www.zertrox.de

Vision Sensors, Smart Cameras & Embedded Systems

Acal BFi Germany	www.bfioptilas.com
Active Silicon	www.activesilicon.com
Adaptive Vision	www.adaptive-vision.com
Adlink	www.adlinktech.eu
Advantech Europe	www.advantech.eu
AIT Göhner	www.visionandid.com
Alfavisision	www.alfavisision.de
AMS Technologies	www.amstechnologies.com
Asentics	www.asentics.de
Banner Engineering	www.bannerengineering.com
Basler Vision Technologies	www.baslerweb.com
Baumer	www.baumer.com
Camsensor Technologies	www.camsensor.com
Cmos Vision	www.cmosvision.com
Cognex	www.cognex.com
Compar	www.compar.ch
Computer Dynamics	www.cdynamics.com
Cosyco	www.cosyco.de
Cretec	www.cretec.gmbh
Datalogic	www.datalogic.com
De Man Industrie-Automation	www.deman.de
Si-soric	www.di-soric.de
Eltec Elektronik	www.eltec.com
Erhard + Leimer	www.erhardt-leimer.com
EVT Eye Vision Technology	www.evt-web.com
Fabrimex Systems	www.fabrimex-systems.ch
Fastvision	www.fast-vision.com
Festo	www.festo.com
Fibervision	www.fibervision.de
Finger	www.finger-kg.de
Flir Advanced Thermal Solutions	www.flir.com
Framos	www.framos.com
FSI Technologies	www.fsinet.com
G4 Technology	www.g4.com.tw
Hans Turck	www.turck.com
Hema	www.hema.de
Hexagon Manufacturing Intelligence	www.hexagonmi.com
IBN	www.ibn-gmbh.de
IDS Imaging Development Systems	www.ids-imaging.com
Ifm Electronic	www.ifm.de
Image House	www.imagehouse.kk
Image S	www.imagessrl.com

Imaging Solutions Group	www.isgcameras.com
Imago Technologies	www.imago-technologies.com
Imagsa Technologies	www.imagsa.com
IMR Automatisierungstechnik	www.imr-le.de
Infaimon	www.infaimon.com
IOS	www.ios-web.de
IOSS	www.iooss.de
Ipf Electronic	www.ipf-electronic.de
IS Imaging Solutions	www.imaging-solutions.de
Isra Vision	www.isravision.com
ISW	www.isw-gmbh.biz
Japan F.A. Systems Corporation	www.jfas.co.jp
K + P Krempien + Petersen	www.kup-image.de
Keyence	www.keyence.de
Kontron	www.kontron.com
Lambda Photometrics	www.lambdaphoto.co.uk
Leutron Vision	www.leutron.com
Leuze Electronic	www.leuze.com
LMI Technologies	www.lmi3d.com
Lord Ingenierie	www.lord-ing.com
Luster LightVision Tech	www.lusterinc.com
Matrix Vision	www.matrix-vision.de
Matrox Imaging	www.matrox.com/imaging
MaxxVision	www.maxxvision.com
MaZet	www.mazet.de
Menzel Vision and Robotics	www.menzelab.com
Micro Epsilon	www.micro-epsilon.com
Microsystems	www.microsystems.it
Msvision	www.msvision.com
National Instruments	www.ni.com
NET New Electronic Technology	www.net-gmbh.com
Neupro Solutions	www.neupro-solutions.com
Neuricam	www.neuricam.com
Norpix	www.norpix.com
Odem Technologies	www.odem.co.il
Omron Microscan Systems	www.microscan.com
Omron	www.industrial.omron.de
Opto	www.opto.de
Optomotive	www.optomotive.si
Orbis	www.orbis.eu
Panasonic Electric Works	www.panasonic-electric-works.de
Parameter	www.parameter.se

Pepperl & Fuchs	www.pepperl-fuchs.com
Peter Scholz Software + Engineering	www.scholzsue.de
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
PMDTec	www.pmdtec.com
Pollux	www.pollux.com.br
Polytec	www.polytec.de/bv
PPT Vision	www.pptvision.com
Profactor	www.profactor.at
Pulsotronic	www.bildverarbeitung.pulsotronic.de
Qualimatest	www.qmt.ch
Rauscher	www.rauscher.de
RSB Optotechnik	www.rsb-optotechnik.de
SAC	www.sac-vision.de
Schäfter+Kirchhoff	www.sukhamburg.de
Schmachtl	www.schmachtl.at
Schunk	www.schunk.com
Scintacor	www.scintacor.com
Second2none	www.visiondragon.com
Sedeco Vision Components	www.sedeco.nl
Sensopart Industriesensorik	www.sensopart.de
Sensor to Image	www.sensor-to-image.de
Shape Drive	www.shape-drive.com
Sharp Microelectronics	www.sharpsme.com
Sick	www.sick.com
Siemens	www.siemens.de/simatic-sensors/mv
SKS Vision Systems	www.visionsystems.fi
Smartek Vision	www.smartekvision.com
Smartray	www.smartray.de
Smartsurv	www.smartsurv.de
Soliton Technologies	www.solitontech.com
Sony	www.pro.sony.eu/vision
Stemmer Imaging	www.stemmer-imaging.com
Supercomputing Systems	www.scs-vision.ch
SVS Vitek	www.svs-vitek.com
Symco	www.symco.co.jp
Tattile	www.tattile.com
Tekno Optik	www.teknooptik.se
Teledyne Dalsa	www.teledynedalsa.com
Tichawa Vision	www.tichawa.de

Topsenso	www.topsenso.de
Tordivel	www.scorpionvision.com
Turck	www.turck.de
TYZX	www.tyzx.com
Vega Technology Group	www.vegatcgroup.com
Vialux	www.vialux.de
Videor Technical	www.videor.com
Video Systems	www.videosystems.it
Visicontrol	www.visicontrol.com
Visiolaser	www.vannier-photelec.fr/visiolaser
Vision & Control	www.vision-control.com
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Vision Tools	www.vision-tools.com
Visionlink	www.visionlink.it
VRmagic	www.vrmagic.com
Webview	www.webspec.com
Wenglor Sensoric	www.wenglor.com
Werth Messtechnik	www.werthmesstechnik.de
Wintriss Engineering	www.weco.com
Ximea	www.ximea.com
Xiris Automation	www.xiris.com
Zertrox	www.zertrox.de
ZheJiang Huaray Technology	www.huaraytech.com

Vision Systems, Turnkey Solutions, Integration Services

3D Shape	www.3d-shape.com
ABB	new.abb.com
Act Smartware	wp.act-smartware.de
Adaptive Vision	www.adaptive-vision.com
Adept Electronic Solutions	www.adept.net.au
Adept Technology	www.adept.de
AGR International	www.agrintl.com
AIT Göhner	www.ait.de
AKU Vision Technologie	www.aku.eu
Alfa Vision Systems	www.alfavisionsystems.com
Alfavisio	www.alfavisio.de
Alliance Vision	www.alliancevision.com
Altair Industries	www.altairindustriesinc.com
Applied Vision	www.appliedvision.com
Asentics	www.asentics.de
ATN Automatisierungstechnik	www.atn-gmbh.com
Attentra	www.attentra.de
Automation Technology	www.automationtechnology.de
Automation W+R	www.automationwr.de
Autoware	www.autoware.it
AVT Advanced Vision Technology	www.avt-inc.com
Balluf	www.balluf.com
Basler Vision Technologies	www.baslerweb.com
Baumer	www.baumer.com
Beratronic	www.beratronic.de
Bertram Elektrotechnik	www.bertram-bevern.de
Bi-Ber	www.bilderkennung.de
Böwe Systec	www.boewe-systec.com
Brainware Solutions	www.null-ppm.info
BST eltromat International	www.bst-international.com
BST International	www.bst-international.com
Camsensor Technologies	www.camsensor.com
Carl Zeiss Optotechnik	optotechnik.zeiss.com
Ceres Vision	www.ceresvision.de
China Daheng Group	www.daheng-image.com
CLK	www.clkgmbh.de
Cognex	www.cognex.com
Cogniac	www.cogniac.co
Coherix	www.coherix.com
Compar	www.compar.ch
Cosyco	www.cosyco.de
Cosynth	www.cosynth.com

Cyth Systems	www.cyth.com
Datalogic	www.datalogic.com
Datapixel	www.datapixel.com
Degotec	www.degotec.com
De Man Industrie-Automation	www.deman.de
DE Software & Control	www.de-gmbh.com
Desconpro Engineering	www.desconpro.de
Digital West Imaging	www.highspeedvideos.com
Divisoft	www.divisoft.com
DMC Vision & Motion	www.dmc-vision-motion.de
Dr. Schenk Industriemesstechnik	www.drschenk.com
Dr. Schwab Inspection Technology	www.schwabinspection.com
Dunkley International	www.dunkleymachinevision.com
Dutch Vision Systems	www.dvs-vision.de
E3tam	www.e3tam.com
Eckelmann	www.eckelmann.de
Edixia	www.edixia.com
EHR	www.ehr.de
Eines	www.eines.es
Electronic Systems	www.electronicssystemsi.it
Ellips	www.ellips.nl
Emhart Glass	www.emhartglass.com
Envision	www.envision.co.kr
Epix	www.epixinc.com
Epson Deutschland	www.epson.de/robots
Erhard + Leimer	www.erhardt-leimer.com
EVK DI Kerschaggl	www.evk.biz
EVT Eye Vision Technology	www.evt-web.com
Eyec-UK	www.eyec-ukandireland.co.uk
Fast	www.fast-corp.co.jp
Faude Automatisierungstechnik	www.faude.de
FAW Freudenberg Anlagen und Werkzeugtechnik	www.faw-freudenberg.de
FDS Research	www.fdsresearch.si
FiberVision	www.fibervision.de
Finger	www.finger-kg.de
Fuchs engineering	www.fuchs-engineering.de
Fuetec	www.fuetec.de
Futec Europe	www.futeceurope.com
G4 Technology	www.g4.com.tw
Gefasoft	www.gefasoft.com

Gefat Engineering	www.gefat-engineering.de
Gesellschaft für Bild- und Signalverarbeitung	www.gbs-ilmenau.de
GFal	www.gfai.de
Gidel	www.gidel.com
Goldlücke Ingenieurleistungen	www.giib.de
GOM	www.gom.com
Göpel Electronic	www.goepel.com
GPP Chemnitz	www.gppc.de
Grecon	www.grecon.de
Hasotec	www.hasotec.com
Heitec	www.heitec.de
Helms Technologie	www.helms-technologie.de
Hengstmann Solutions	www.hengstmann.com
Hexagon Manufacturing Intelligence	www.hexagonmi.com
I3 Tech	www.i3tech.de
Ibea	www.ibea.de
ICW [industrie-elektronik]	www.icw-news.de
iIM	www.iimag.de
Ikegami	www.ikegami.de
Image House	www.imagehouse.dk
Image S	www.imagessrl.com
Imago Technologies	www.imago-technologies.com
I-mation	www.i-mation.de
Imess	www.imess.com
Impuls	www.impuls-imaging.com
IMR Automatisierungstechnik	www.imr-le.de
INB Vision	www.inb-vision.com
Industrial Vision Systems	www.industrialvision.co.uk
Infaimon	www.infaimon.com
Infratec	www.infratec.de
Inos Automationssoftware	www.inos-automation.com
Inray Solutions	www.inrays.com
Insensiv	www.insensiv.de
In-situ	www.in-situ.de
Inspectron	www.inspectron.ch
Inspekto AMV	www.inspekto.com
Insystems Automation	www.insystems.de
Intego	www.intego.de
Intopii	www.intopii.fi
IOS	www.ios-web.de

Ioss	www.ioss.de
Irida Labs	www.iridalabs.gr
IS Imaging Solutions	www.imaging-solutions.de
Isa Industrielektronik	www.isaweiden.de
Isomorph	www.isomorph.it
Isra Vision	www.isravision.com
ISW	www.isw-gmbh.biz
Itech Engineering	www.itecheng.com
IVS	www.industrialvision.co.uk
J&P Vision	www.jupvision.de
Japan F.A. Systems	www.jfas.co.jp
Jasvisio - Vision Artificial	www.jasvisio.com
JLI Vision	www.jli.dk
Joanneum Research	www.joanneum.at
K + P Krempien + Petersen	www.kup-image.de
Kaiser Computersysteme	www.isotronika.de
Kdorf Automation	www.kdorf.de
Keyence	www.keyence.de
Kirin Techno-System	www.kirintechno.co.jp
KMS Engineering	www.kms-e.de
Kolektor Orodjarna	www.kolektorvision.com
L&P	www.lp-gmbh.de
Laetus	www.laetus.com
Leuze Electronic	www.leuze.com
Limess	www.limess.com
Lincoln Laser Company	www.lincolnlaser.com
Machine Vision Technology	www.machine-vision-technology.co.uk
Menzel Vision and Robotics	www.menzelab.com
Merz freeform.technologies	www.merz-technologies.com
Meta Vision Systems	www.meta-mvs.co.uk
Mettler Toledo Product Inspection	www.mt.com
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Micro Epsilon	www.micro-epsilon.com
Omron Microscan Systems	www.microscan.com
Mikrotron	www.mikrotron.de
Modi Modular Digits	www.modi-gmbh.de
Moser Industrielektronik	www.moser-gmbh.de
Msvision	www.msvision.com
Neogramm	www.neogramm.de
Neupro Solutions	www.neupro-solutions.com

Neuricam	www.neuricam.com
Neurocheck	www.neurocheck.com
Neurotechnology	www.neurotechnology.com
Nikka Research Deutschland	www.nikka-research.com
Nikon Metrology	www.nikonmetrology.com
Nokra	www.nokra.de
Norman N. Axelrod Associates	www.axelrodassociates.com
Norpix	www.norpix.com
Northwire	www.northwire.com
OCS	www.ocsgmbh.com
Octum	www.octum.de
Omron	www.industrial.omron.de
Opsis	www.opsis.de
Optel Vision	www.optelvision.com
OptoFidelity	www.optofidelity.com
OptoNova	www.optonova.se
Orbis	www.orbis.eu
Orbotech	www.orbotech.com
Orus Integration	www.orusintegration.com
Otto Vision Technology	www.otto-jena.de
Panasonic Electric Works	www.panasonic-electric-works.de
Parameter	www.parameter.se
Pattern Recognition Company	www.pattern-recognition-company.de
Paul Leibinger	www.leibinger-group.com
PCE Pharmacontrol	www.pharmacontrol.de
PCS Industries	www.pcindustries.com
Pepperl & Fuchs	www.pepperl-fuchs.com
Perceptron	www.perceptron.com
Peter Scholz Software + Engineering	www.scholzsue.de
Phytec Messtechnik	www.phytec.de
Pi4_robotics	www.pi4.de
Pilz	www.pilz.de
Pixargus	www.pixargus.de
Plasmo Industrietechnik	www.plasmo.eu
POG Präzisionsoptik Gera	www.pog.eu
Pollux	www.pollux.com.br
Polygon	www.polygon-technology.de
Polytec	www.polytec.de/bv
PPT Vision	www.pptvision.com
Pressco Technology	www.pressco.com

Profactor	www.profactor.at
Prüftechnik Schneider & Koch	www.prsuk.de
Pulsotronic	www.bildverarbeitung.pulsotronic.de
Qualimatest	www.qmt.ch
Quiss	www.quiss.com
R&W Industrieautomation	www.r-u-w.de
Radix Controls	www.radixcontrols.com
Rbc robotics	www.rbc-robotics.de
Recognitec	www.recognitec.de
RH Engineering	www.rhengineering.de
Rohwedder	www.rohwedder.com
RSB Optotechnik	www.rsb-optotechnik.de
Rubroeder	www.rubroeder.de
Rudolph Technologies	www.rudolphtech.com
SAC	www.sac-vision.de
Scanware electronic	www.scanware.de
Schäfter+Kirchhoff	www.sukhamburg.de
Schmachtl	www.schmachtl.at
Schönherr Elektronik	www.schoenherr-elektronik.com
Second2none	www.visiondragon.com
Seidenader	www.seidenader.de
Sensor Control	sensor-control.de
Serview	www.serview.net
Servo-Robot	www.servorobot.com
Sidonia Systems	www.sidoniasystems.de
Signum	www.signum-vision.de
Simac Masic	www.simacmasic.nl
Simon IBV	www.simon-ibv.de
SL Tec	www.sltec.de
Smartray	www.smartray.de
Solex	www.solexvision.com
Solving3D	www.solving3d.de
Soma	www.soma.de
SPG Data 3D	www.spgdata3d.com
Carl Zeiss Optotechnik	optotechnik.zeiss.com
Stemmer Imaging	www.stemmer-imaging.com
Stöhrmann Systemtechnik	www.stoehrmann.de
Stratec Control Systems	www.bbull.com
STZ Qualitätssicherung und Bildverarbeitung	www.stz-ilmenau.de
Sundance Multiprocessor Technology	www.sundance.com

Surface Inspection	www.surface-inspection.com
SVS Vistek	www.svs-vistek.com
Symacon Engineering	www.symacon.de
Symetix	www.symetix.com
Sys Vision	www.isys-vision.de
Syscon	www.syscon-vision.de
Systech	www.systech-tips.com
Systematic Vision	www.systematicvision.com
Tattile	www.tattile.com
Technoteam	www.technoteam.de
Teledyne Dalsa	www.teledynedalsa.com
Tema	www.temavisio.com
Thermosensorik	www.thermosensorik.de
Tiama	www.tiama.com
Tichawa Vision	www.tichawa.de
Tordivel	www.scorpionvision.com
Trivision	www.trivision.dk
TST Engineering & Vision	www.tstvision.com
TYZX	www.tyzx.com
Unique Vision	www.unique-vision.net
Univision	www.univision.it
Vega Technology Group	www.vegatcgroup.com
Vester Elektronik	www.vester.de
Videometer	www.videometer.com
Video Systems	www.videosystems.it
View-Factor	www.view-factor.com
Vigitek	www.vigitek.com
Viscom	www.viscom.com

Visicontrol	www.visicontrol.com
Visimation	www.visimation.de
Visio Nerf	www.visionerf.com
Visiolaser	www.vannier-photelec.fr/visiolaser
Vision Automation	www.visionautomation.dk
Vision Experts	www.vision-experts.com
Vision Machines	www.vision-machines.com
Vision Tools	www.vision-tools.com
Vision-Consult Bildverarbeitung	www.vision-consult.com
Visionlink	www.visionlink.it
Visiotek	www.visiotek.com.tr
Visolution	www.visolution.de
Visotect	www.visotect.de
Visuelle Technik	www.visuelle-technik.de
ViTec	www.vitec.ru
Vitronic	www.vitronic.com
VMT	www.vmt-gmbh.com
V-Research	www.v-research.at
Weber Systemtechnik	www.wesys.de
Weiss Imaging and Solutions	www.weiss-imaging.de
Weitblick Systems	www.weitblick-systems.at
Wenglor Sensoric	www.wenglor.com
Wente/Thiedig	www.wente-thiedig.de
Wickon Hightech	www.wickon.com
Wintriss Engineering	www.weco.com
Wolf Systeme	www.wolfssysteme.de
Zertrox	www.zertrox.de
Ziemann & Urban	www.ziemann-urban.de

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