

AUTOMATIONDIRECT.com

BARCODE / RFID / VISION



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Industrial Identification Systems at great prices!

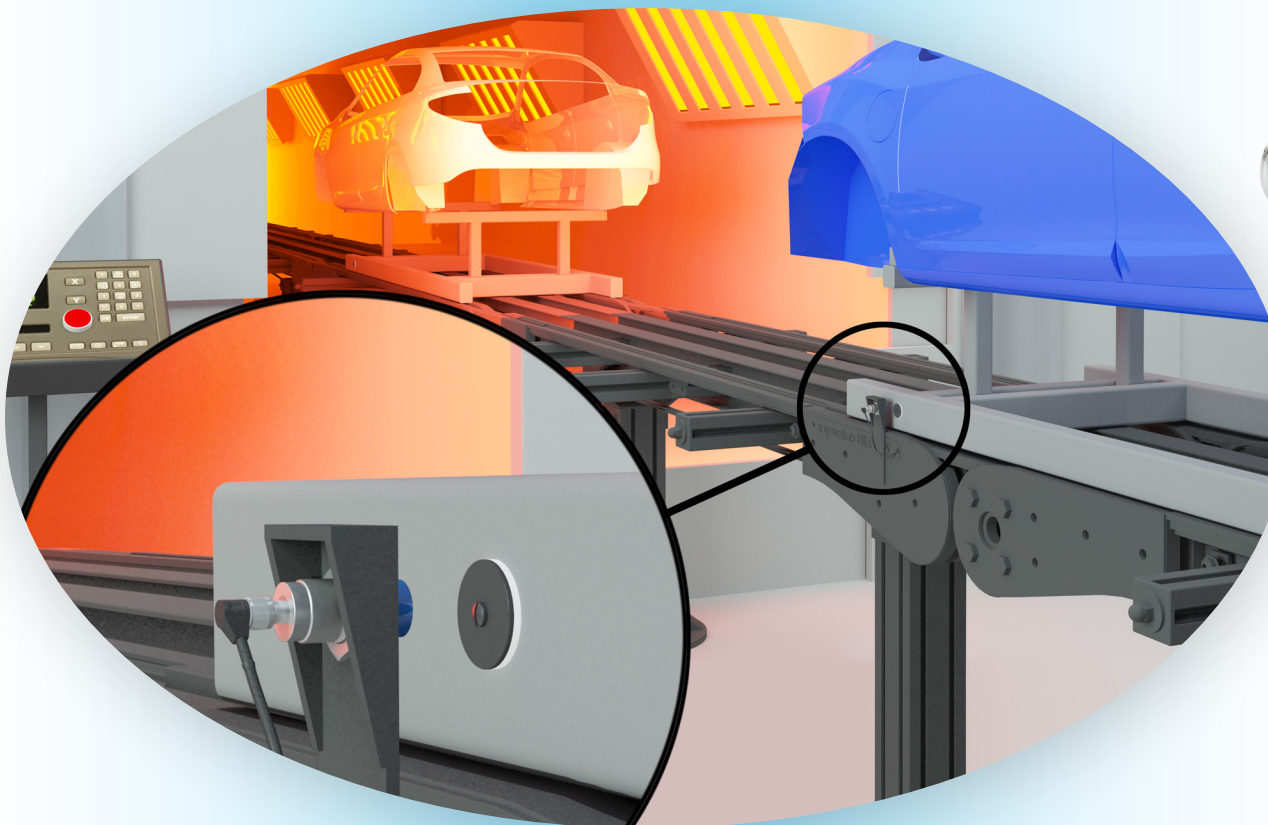
What are industrial Identification systems?

Identification systems are used in industrial automation to identify a product, part, symbol, mark or perform a quality check. The three main types of technology used in industrial identification are RFID, vision systems and optical identification, which include barcode scanners.

RFID read/write units use radio frequency identification technology to identify a product or part that has an RFID tag attached to it as it passes near the RFID scanner. They also have the ability to write data to RFID tags so the communication between the unit and product is essentially 2-way. RFID read/write units don't need to have an uninterrupted line of sight to the tag it is transmitting data to/from and marks or dirt on the tag have no effect on performance.

Barcode scanners are the most common type of industrial identification system and the equipment that we normally think of when we want to identify a product. They use a combination of lasers and optical componentry to read a barcode on a label, embedded or etched onto a product. Barcode scanners come in many form factors and styles, from a fixed mount unit on a machine which can be a simple single-sided read to a very complex multi-head system used in a state-of-the-art warehouse. Hand-held units are also available that are simple to set up and use.

Industrial vision systems can mean many different types of products. Sometimes these are used in place of barcode scanners where the accuracy of reading labels of potentially poor quality is favored over speed. Sometimes these products can be used in quality control applications as well. Like barcode scanners, these systems can range from simple to very complex.



Why buy identification system products from us?

There are several distinct advantages to purchasing RFID components or barcode scanners from AutomationDirect:

Price

As with all of our product lines, our prices are often well below the list prices of traditional automation suppliers. Our direct business model allows us to operate more efficiently than other suppliers and pass the savings on to you.

Quality

All of our identification products carry a 1-, 2-, 3-, or 5-year warranty. Contrinex RFID read/write units carry a lifetime warranty. If for any reason you are not satisfied with your purchase, we have a 45-day money back guarantee.

Service

We give you options for self-service but at the same time, we are there when you need us. You can place your order online or call our customer service folks. Have a technical question about one of our products or need help gathering up a bill of materials for one of your projects? You can call our free technical support.



code

mBRV-2 Barcode/RFID/Vision

AUTOMATIONDIRECT.com

1-800-633-0405

<https://www.automationdirect.com/barcode-rfid-vision>



DATALOGIC THE VISION IS YOURS **CONTRINEX**

Barcode/RFID/Vision mBRV-3

code Barcode Scanners Provide a Practical Identification Solution

Barcode scanners allow a code, such as a 1-dimensional barcode, 2-dimensional QR code or other non-human-readable code to be read, decoded and converted to a usable format. This code is then sent to an intelligent device such as a PLC or PC over a network such as RS232 or USB. Several models are available to read the barcodes required for your application.

CR950 Series Hand-Held Barcode Scanners

This easy-to-use, durable barcode reader outperforms single-line laser scanners and linear imagers with full omnidirectional barcode reading. Combined with its programming versatility, the CR950 quickly and reliably transmits barcoded data into any enterprise solution.

- High-speed, omnidirectional reading of 1D and 2D barcode symbologies
- Manual or automatic triggering. Stand (sold separately) is required for automatic triggering
- User feedback with LED and audible tone
- All-inclusive kits include reader and cable
- Reads barcodes on backlit screens such as mobile devices
- Optional stand (sold separately)



Starting at
\$156.00
(CR950-K301-C298)

CR1100 Series Hand-Held or Presentation Mode Barcode Scanners

The lightweight Code Reader™ 1100 (CR1100) is a compact barcode reader that takes up limited workspace without compromising barcode reading performance. The patented dual-field optical platform of the CR1100 allows users to quickly scan both wide 1D and small 2D barcodes.

- High-speed, omnidirectional reading of 1D and 2D barcode symbologies
- Manual or automatic triggering
- Pre-threaded screw holes to allow for mounting
- User feedback with LED and audible tone
- Reads barcodes on mobile device screens
- Efficient power consumption (lowest in its class)
- Optional stand (sold separately)



Starting at
\$240.00
(CR1100-K201-C298)



CR1500 Series Hand-Held Barcode Scanners

The Code Reader™ 1500 (CR1500) is a compact, rugged, tethered barcode reader that features a high-performance scan engine, dual-field optical platform, and intuitive targeting that makes reading 1D, 2D, and postal barcodes extremely fast and reliable.



Starting at
\$246.00
(CR1500-K201-C298)

- Serial interface available for easy Programmable Logic Controller connectivity
- Optimized to read high-density codes
- Efficient power consumption
- Compatible with Code's rapid disconnect USB and RS232 Affinity® cables
- Reads barcodes on mobile device screens
- Manual or automatic triggering

CR5000 Series Table-Top Presentation Mode Barcode Scanners

The CR5000 Series is designed for fast-paced environments and handles data from 1D, 2D, and postal barcodes with speed and accuracy. Advanced data formatting provides dependable data integration into any platform, system, or solution — including iOS applications.



Starting at
\$318.00
(CR5210-C500-C298)

- Extended read ranges
- Enhanced barcode recognition and detection for codes in motion
- Improved code reading on mobile device screens
- Reads color and low-contrast barcodes
- Hands-free operation or optional trigger reading large, heavy, bulk items
- Efficient power consumption
- Compatible with Code's rapid disconnect USB and RS232 Affinity® cables

code[®] Barcode Scanners

CR2700 Series Hand-Held Barcode Scanners

The CR2700 series introduces Bluetooth[®] 5, increasing the security level on data transmission. By implementing a Bluetooth Low Energy radio, Code has extended the battery life on the CR2700 to further minimize downtime during shifts. A built-in gauge tells users when it is time to change the battery.

- Reads barcodes on mobile device screens
- Patented glare reduction technology for reading barcodes on shiny surfaces
- Multiple programmable buttons for customized workflow processes
- Batch Mode to scan, store, then offload data via the connected base station
- Inductive charging stations
- The reader can connect to any Windows computer that has Bluetooth Low Energy 5 without using a base or dongle
- High-speed, omnidirectional reading of all 1D, 2D, Postal barcodes
- IP65 rating seals out dust and moisture
- Durable, quick-release rechargeable battery cartridges
- Bluetooth 5 for enhanced data security
- Patented dual-field optics, with both high density and wide field in the same unit



Starting at
\$764.00
(CR2701-200-C298)



Code Barcode Scanner Accessories

AutomationDirect offers a full line of accessories for the Code Reader[™] line of barcode scanners. Both USB and RS232 communications cables are available as well as a power supply and flexible and rigid stands.



DATALOGIC THE VISION IS YOURS Barcode Scanners

Datalogic PowerScan 960X Series Barcode Scanners

The Datalogic PowerScan 960X Series barcode scanners are a rugged industrial handheld scanner. These cordless barcode scanners are designed to withstand demanding environments and can capture low-density 1D and 2D codes within normal reading ranges.

- Ergonomic shape and well-balanced weight to reduce operator stress
- Very rugged design, tested to resist more than 50 drops at 8ft on concrete
- Omnidirectional reading on 1D, stacked and 2D codes, postal codes
- 1280 x 800 optical resolution
- Inductive, contactless charging technology
- Cordless communications options include 910MHz RF or Bluetooth® 5.0
- Communication options to cordless base include USB or RS-232
- Environmental ratings include IP65 and IP67; Cradle IP65



Complete PowerScan PM9600 system, including cordless 2D barcode scanner with 910MHz RF communications.



Complete PowerScan PBT9600 system, including cordless 2D barcode scanner with Bluetooth 5.0 communications.



Datalogic PowerScan 960X Accessories

An array of accessories is available for the PowerScan960X scanners to complete your system or replace various items of an existing system.

- Replacement standalone barcode scanners in 910MHz RF or Bluetooth communications
- Replacement base stations in RF or Bluetooth communications
- Scanner vehicle mount
- Replacement batteries
- Base station power supplies
- Power supply power cords
- Serial and USB communications cables





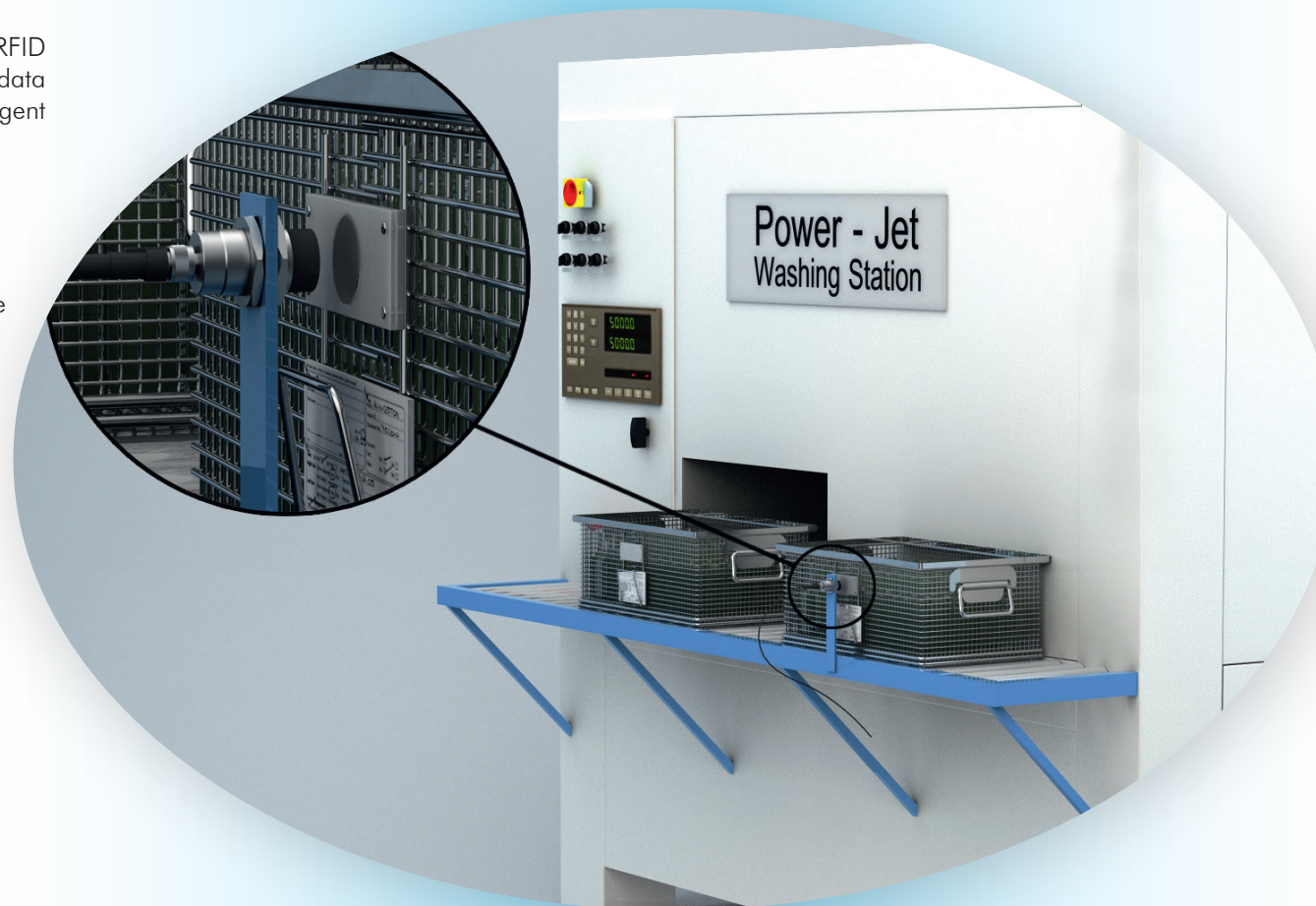
RFID Devices are a Rugged Identification Solution Even in Dirty Environments

RFID devices use radio frequencies to read and transmit data. RFID read/write modules exchange data with RFID tags which store data in local memory. They may also communicate with an intelligent device, such as a PLC or computer, over a network such as IO-Link.

RFID Read/Write Devices

RFID read/write modules are transceivers that can read and write data to/from RFID tags (transponders) using high-frequency RFID technology. Contrinex RFID read/write modules offer fast data transfer times and communicate to higher-level devices such as a PLC over a communications network. These RFID Read/Write units use the IO-Link protocol.

- M18, 18mm diameter size can read up to 34mm away, IP67 environmental rating
- M30, 30mm diameter size can read up to 50mm away, IP67 environmental rating
- 44mm x 44mm cube style can read up to 78mm away, IP68/IP69k environmental rating
- HF RFID technology operates on 13.56 MHz and complies with ISO/IEC 15693
- Line of sight not required to read tags
- Dirt or other markings on tags do not affect the readability of data
- IO-Link V1.1 compatible



Starting at
\$206.00
(RLH-M18PA-NIS)



AutomationDirect Standalone RFID Read/Write Unit

The AutomationDirect standalone RFID read/write unit is designed for easy integration into an existing EtherNet/IP network. It is optimized for high speeds and large data transfer.

Features:

- Complete unit with RFID R/W device with built-in antenna
- Easy integration
- Built-in interface for EtherNet/IP
- Maximum read/write distance of 220mm*
- Adjustable range/transmitting power
- RFID HF 13.56 MHz per ISO 15693
- IP67 protection rating

* R/W distance is dependent on the type of tag/transponder, applications and environment

RFID Tags

RFID Tags (also known as transponders) are electronic devices that store data. The tag has fixed memory which stores a unique preset number (i.e. an identifier) as well as user memory which can be written to for storing application's data. Writable data may include, for example, the object's history or the parameters of operations to which it will be subjected. EEPROM and FRAM memory type tags are available.

- Sizes available include 9mm, 16mm, 20mm, 30mm, and 50mm
- Memory sizes from 256 to 2048 bytes
- High-temperature model made from PPS (polyphenylene sulfide)
- Protection ratings of IP67, IP68, and IP69k
- EEPROM tag features
 - Unlimited read cycles
 - 100,000 write cycles
 - 4 bytes per block
- FRAM tag features
 - Unlimited read cycles
 - 10¹² write cycles
 - Up to 2,000 bytes of user memory per device
 - 8 bytes per block





Smart Industrial Vision Products at a Great Price

Vision systems process information from a captured image. Actions taken can range from a simple pass/fail, GOOD/NO GOOD output to making complex decisions based on an image. Applications include quality assurance inspection for processing, bottling lines, food and beverage, and packaging machinery, as well as assembly.

Vision sensors are intelligent, self-contained systems that can capture an image of an object as it passes by and are capable of making a decision based on the captured image. Some examples of the types of decisions they make might be a pass/fail based on a label orientation, the fill level of a beverage bottle, or even complex decisions that involve the color of a product to determine proper quality assurance.

Datalogic Smart-VS Series Vision Sensors

The Datalogic Smart VS series vision sensors are a simple yet powerful industrial vision solution that uses artificial intelligence. These sensors require no industrial vision experience or special training. The setup is as easy as training the device on what to accept or reject using a web interface. All Datalogic Smart VS vision sensors include the following features:

- Machine-assisted learning technology
- Bright and highly visible red LED pointer
- Powerful white polarized light illuminator
- Easy photosensor-style output interface
- 50ms deterministic response time
- Cable exit connections can be rotated to accommodate a variety of installation configurations



Priced at
\$1,192.00
(959970005)

Smart-VS Plus Sensors

The Smart-VS Plus sensor adds additional object detection classifications to allow for more than one inspection setup. The Smart-VS Plus vision sensor provides all of the features of the Smart-VS and adds:

- 3-class classification (GOOD/NO GOOD/NO OBJECT)
- Imager support for a total of 20 stored images
- Support for examination of more intricate details than the Smart-VS
- Useful when GOOD/NO GOOD/NO OBJECT tests need to be performed
- 50-400 mm operating distance



Priced at
\$984.00
(959971320)

Smart-VS Sensors

The Smart-VS sensor is the most basic vision sensor in this series, offering embedded artificial intelligence technology, but simple to configure. It is a great sensor for, entry-level pass/fail vision sensor applications.

- 2-class classification (GOOD/NO GOOD)
- Imager supports a total of 6 stored images
- Great for GOOD/NO GOOD applications that only need to perform 1 inspection
- 50-150 mm operating distance
- 3 outputs, 2 inputs
- Ethernet communications

The Smart-VS system teaches the sensor to recognize GOOD/NO GOOD/NO OBJECT conditions. Here are examples of basic GOOD/NO GOOD (classification) testing that can be done with the Smart-VS sensor. The Smart-VS Plus adds a NO OBJECT test.

Application name	Solved cases (OK / NOT OK)	
Check label presence		
Cap orientation		
Cap presence		
Check printing on label		



Smart Industrial Vision Products at a Great Price



Priced at
\$1,327.00
(959970009)

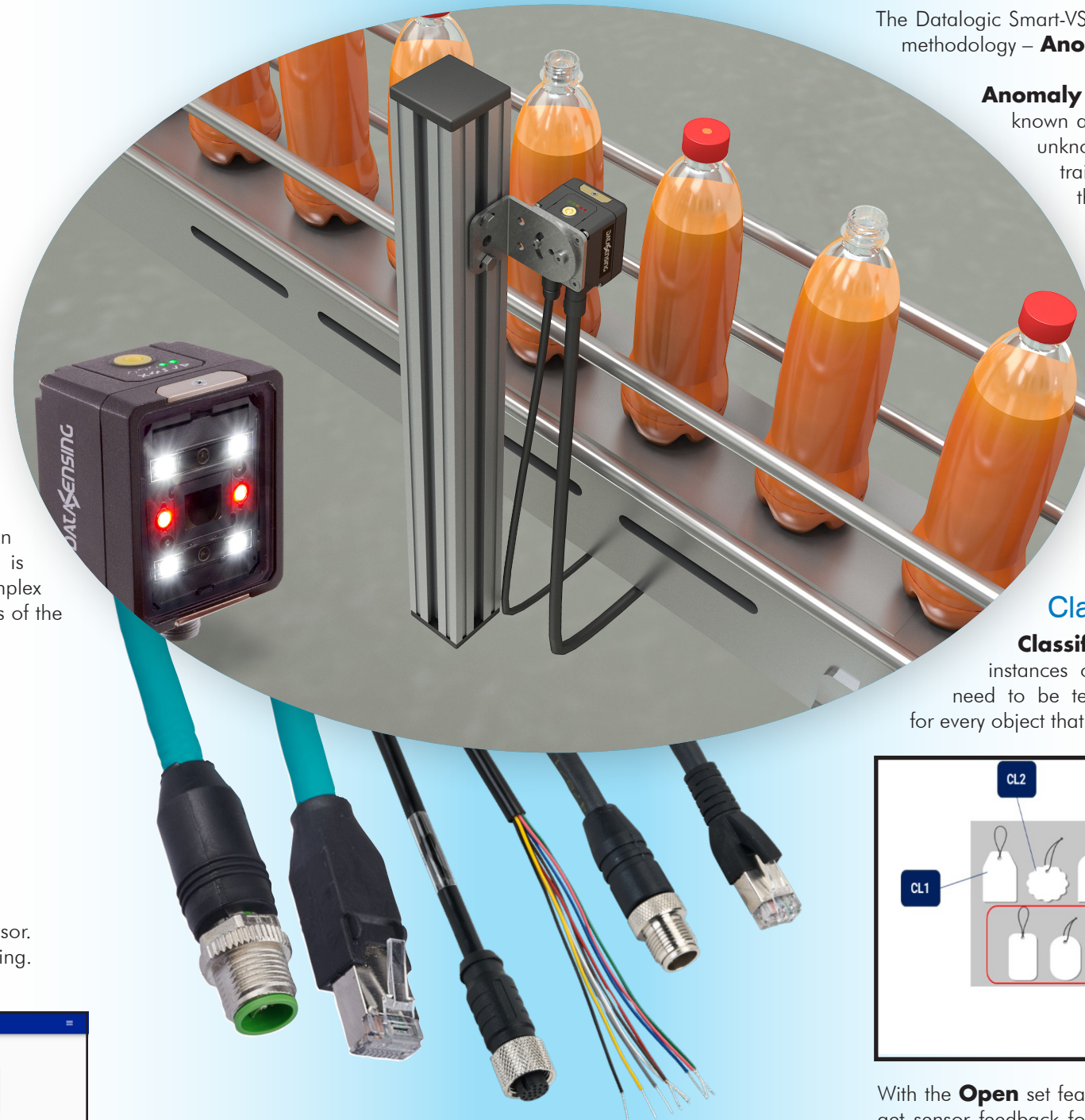
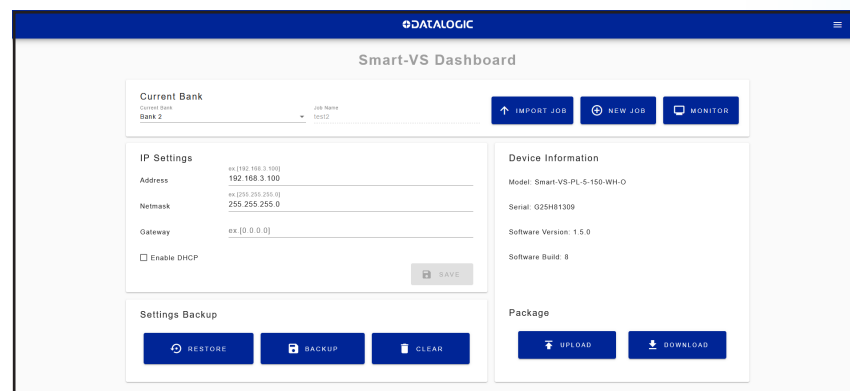
Smart-VS EVO Sensors

The Smart-VS EVO sensor adds additional object detection classifications to support numerous inspection setups. This is Datalogic's most advanced vision sensor, great for more complex applications. The Smart-VS EVO model provides all of the features of the Smart VS+ and adds:

- 6-class classification
- Imager support for a total of 50 stored images
- Support for multiple types of GOOD/NO GOOD/NO OBJECT inspections
- Anomaly detection for untrained images
- 4 outputs, 2 inputs

Easy-To-Use Web Interface

No software needs to be installed to configure a Smart-VS sensor. All setup is performed using a web-based GUI for sensor training. No experience is necessary.



Vision Device Accessories

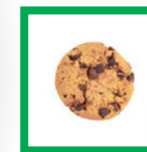
Many accessories are available for vision devices, including mounting brackets, and M12 X-coded Cat6a high-flex shielded industrial Ethernet cables. These cables are available in up to 5m / 16.4ft lengths for high-performance vision applications up to 10Gbps full duplex communication.

Anomaly Detection

The Datalogic Smart-VS EVO offers even greater flexibility thanks to two types of inspection methodology – **Anomaly Detection** and **Classification**.

Anomaly Detection is generally preferred when the GOOD part is well known and defined, and the NO GOOD parts can have an unexpected or unknown status that cannot be learned previously. The system can be trained on a GOOD part and will identify any parts that do not match the GOOD part.

**GOOD
LEARNED**

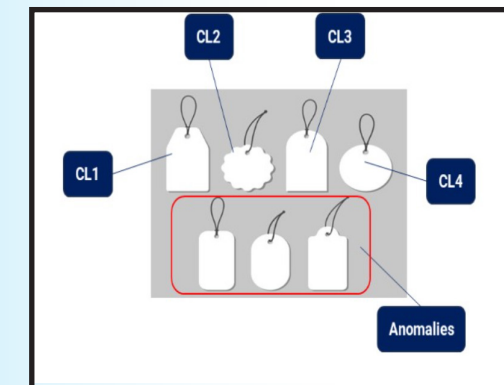


**NO GOOD
NOT LEARNED**



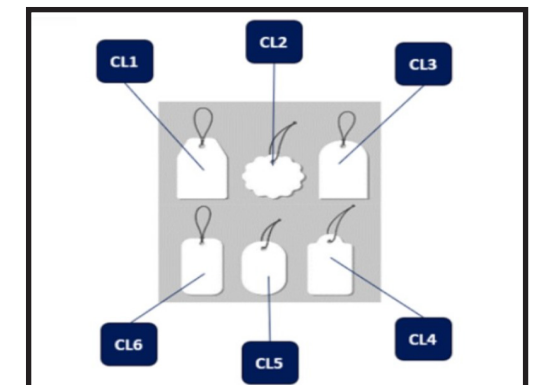
Classification

Classification is an inspection method that should be used when all the instances of GOOD/NO GOOD are known, or if multiple object classes need to be tested for the application. Every instance of GOOD/NO GOOD for every object that will be tested must be learned by the sensor.



With the **Open** set feature, it is possible to get sensor feedback for anomalies that do not belong to any of the trained classes.

In the example above, Classes 1 through 4 are learned, while the anomalies are not learned.



With the **Closed** set feature, the sensor does not give feedback for anomalies. Any detected object will be assigned to one of the trained classes, and the sensor will provide a result of GOOD/NO GOOD.

In the example above, the system has been positively trained to identify Classes 1 through 6. Any detected object will be assigned the closest match. If it is not a perfect match, the result would be NO GOOD.



ifm Barcode scanners, 2D Cameras, and 3D Vision Sensors

ifm efector barcode scanners, 2D cameras, and 3D vision sensors provide premium industrial identification from a trusted brand name. All ifm efector devices are configurable with the free ifm Vision Assistant. Whatever your identification needs, ifm efector has you covered.

O2I Series Barcode Scanners

ifm machine-mountable barcode scanners are capable of reading many popular industrial 1D and 2D codes such as Code 128, Code 39, QR codes, and many more. They are an excellent choice for machine-mount, conveyor-mounted, or process equipment mounting applications.

- Quality improvement through accurate tracking
- Autofocus with alignment laser
- Four built-in lights (2 non-polarized and 2 polarized)
- Two configurable outputs
- Onboard logic engine
- IP65 environmental rating
- Local device backup and cloning
- Optical Character Recognition (OCR)
- EtherNet/IP and TCP/IP communications supported

Priced at
\$1,436.00
(O2I502)



O2D Series Cameras

ifm 2D cameras are simple-to-use self-contained vision systems that provide reliable image-based detection. These cameras are machine-mountable and perform many operations, such as contour detection or BLOB analysis. This family of vision sensors excels at solving many error-proofing and inspection applications for a fraction of the cost of other vision systems and sensors. They are suitable for many industrial, quality, and process applications.

- Autofocus
- Four built-in lights (2 non-polarized and 2 polarized)
- Up to five configurable outputs
- Local device backup and cloning
- Onboard logic engine
- IP65 environmental rating
- Anchor tracking
- Multiple-image analysis at various exposure rates
- Contour and BLOB detection
- 1.2MP imager resolution
- EtherNet/IP and TCP/IP communications supported

Priced at
\$1,436.00
(O2D502)



O3D Series Vision Sensors

ifm 3D vision sensors are advanced self-contained vision systems that use time of flight technology to measure over 23,000 points on an object within the sensor's field of view. They are machine-mountable and useful for volume and surface dimensioning in many industrial and process applications.

- Extremely robust against ambient light and color changes
- Digital switching between 32 recipes
- Three configurable outputs
- Internal infrared light source
- Onboard logic engine
- IP65 environmental rating
- EtherNet/IP and TCP/IP communications supported



Priced at
\$1,520.00
(O3D302)

ifm Scanner, Camera and Vision Sensor Accessories

Many accessories are available for ifm vision devices, including mounting brackets/rods and heatsinks.





di-soric 2D Machine Vision Cameras

Low-cost di-soric 2D machine vision cameras offer precise, high-speed inspection and measurement in manufacturing. Their advanced image processing capabilities ensure accurate defect detection, part positioning, and quality control. Easy integration and user-friendly software reduce setup time and complexity. These cameras boost productivity, minimize downtime, and enhance overall process reliability, making them ideal for modern automated production environments.

CS-60 Series 2D Cameras

The di-soric CS-60 series 2D cameras have an integrated lighting system and interchangeable S-Mount lenses, which allow for the use of various filters and accessories. In conjunction with the free nVision-i software, these cameras provide an ideal solution for applications that require increased flexibility or handle complex inspection tasks.

- A wide variety of focal lengths through M12 interchangeable lenses
- Image correction and calibration
- Reliable and fast, high-performance image processing tools
- User-friendly, intuitive software interface
- Ethernet communications support for TCP/IP, FTP Client, SFTP Client, PROFINET Client, and EtherNet/IP
- 3 inputs and 5 discrete outputs (NPN/PNP)
- Manually adjustable S-mount lens (8mm lens included)
- Integrated high-power white or red LED illumination (switchable in software)
- Configurable digital and network communications
- Onboard logic engine
- Robust, compact housing with IP67 rating (when included lens cover is installed)
- Accessories include mounting hardware and connection cables



di-Soric S-Mount Lenses

di-soric industrial machine vision cameras utilize S-Mount lenses, with a standard M12 (12mm) mounting diameter and 0.5mm pitch thread.

These lenses provide options to customize the system for your specific application. Use a short focal length lens to inspect a smaller portion of your workpiece up close under high resolution. Use a lens with a longer focal length to capture a wider field of view.

A smaller f-stop number indicates a larger aperture opening, letting in more light but creating a shallower depth-of-field. A larger f-stop number indicates a smaller aperture opening, letting in less light but yielding a deeper depth-of-field.

- Standard M12 S-Mount
- Focal lengths available in 3.6mm, 8mm, 16mm, and 25mm
- Fixed apertures available in f/4.0 and f/8.0
- Wide angle and standard angle lens options
- Lens cover and filter accessories include: lens protectors, bandpass filters, polarizers, diffusers, and focus adjustment aids

di-soric Machine Vision 2D cameras support various combinations of the following functions, depending on model: localization, detection, counting, measurement, and read code.

Supported Functions

Localization Function

Localization is the process of estimating the position of an object, part, or robot in relation to its environment.

Measurement Function*

The measurement function can be used to confirm the dimensions of a part or product or to measure distances in pixels or in real space.

Detection Function

Detection is the ability to detect a feature or defect on a product or piece of equipment. It can also be used to determine if the defect/feature is present/not present.

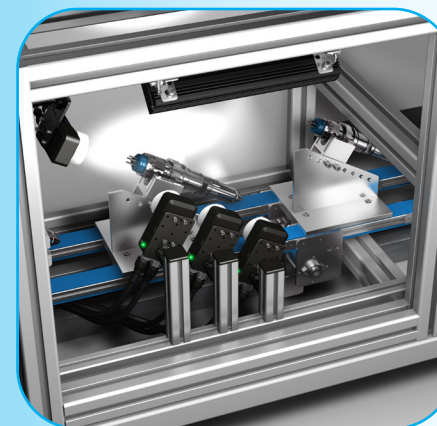
Counting Function

The counting function is the ability to confirm the correct count of parts, products, or other objects.

Read Code Function*

The read code function is the ability to read and decode machine codes, such as bar-codes, 2D codes, or machine markings and etchings.

Common Applications

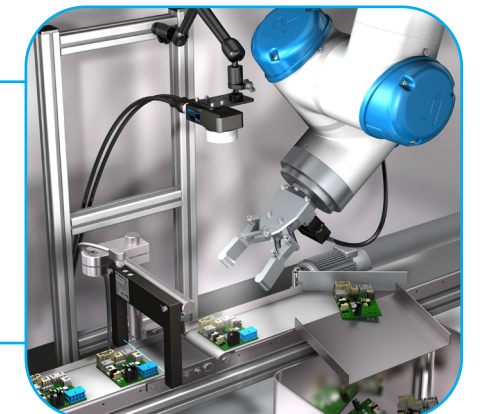


Quality inspection of components

A product is checked for the required quality before packaging.

Vision assisted robotic grasping

Featuring adaptable working distance and image field via the interchangeable S-mount lens as well as the integrated high-power illumination, the CS60 ensures product quality and position verification, enabling reliable robotic grasping.



* only available on specific models



di-soric nVision-i Software

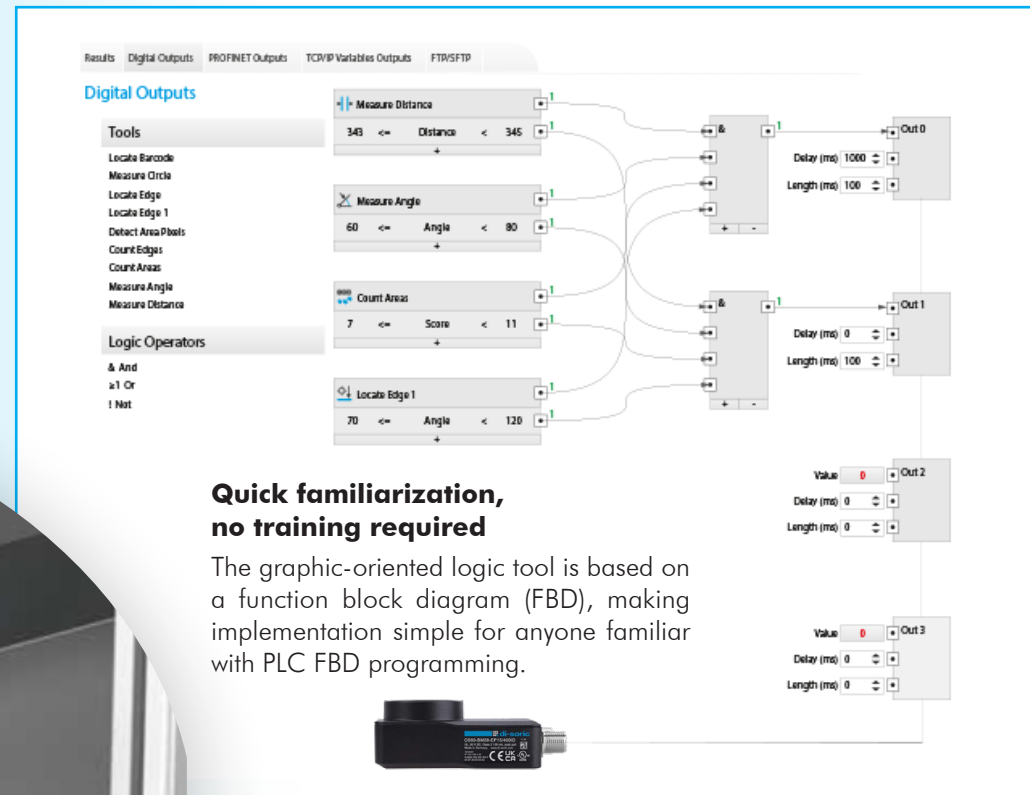
nVision-i Software

The nVision-i software is a free camera programming environment from di-soric for their industrial machine vision cameras. Powerful, easy-to-use software performs many setup functions and has several tools available, including a simulator that allows you to test your configuration without being connected to a camera.

Powerful & Easy-To-Use FREE Software

THE LOGIC TOOL - LINKING RESULTS TO OUTPUTS

Results can be directly linked to the outputs, taking demand off the central control system. The measured values can also be sent out over the network.



Quick familiarization, no training required

The graphic-oriented logic tool is based on a function block diagram (FBD), making implementation simple for anyone familiar with PLC FBD programming.

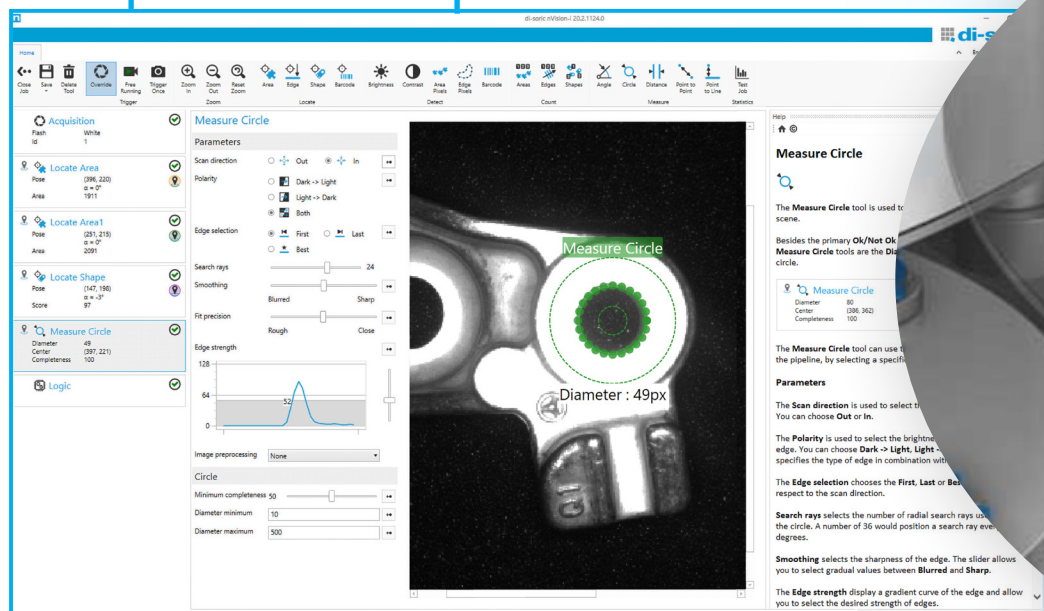


Pipeline and status checks

- Inspection tools can be inserted here and moved via drag-and-drop
- Measured values and inspection results/status are shown here

Navigation bar and inspection tools

- Intuitive and user-friendly navigation menu
- Contextual help can be displayed as needed
- Menu guidance in 7 languages (German, English, French, Italian, Spanish, Chinese, and Korean)



Configuration

- Parameters for search criteria can be set simply and directly
- Threshold values for the evaluation criteria can be entered easily

Display & drawing tools

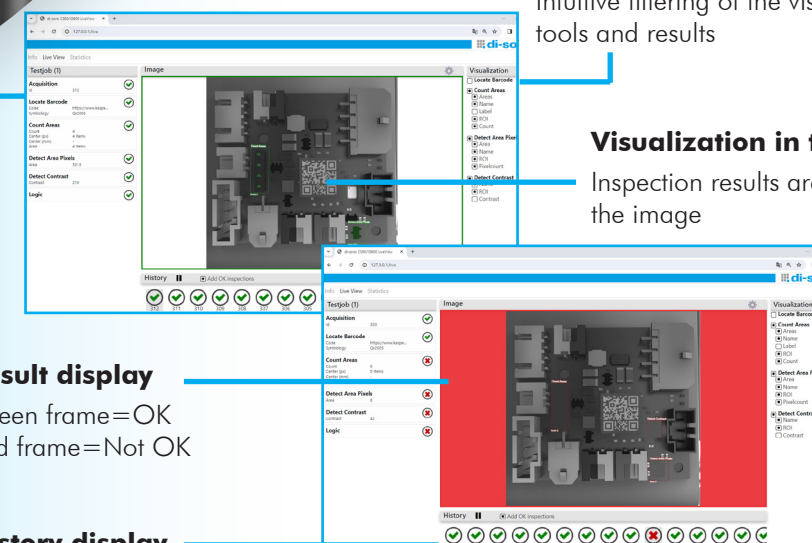
- Image viewing for control and analysis during the operation
- Context-sensitive description of the tools on the right-hand side for ease of use

Integrated image optimization

With just two clicks, nVision-i can be used to easily eliminate distortions and shading at the edge of the image through calibration, giving CS-60 vision sensors the ability to reliably perform all detections across the entire field of view.

Pipeline & status checks

Same feature that is available in the nVision-i software



Result display

Green frame=OK
Red frame=Not OK

History display

WEB-HMI

The WEB-HMI feature allows inspection results to be displayed in a web browser. Easily accessed by entering the IP address of the sensor into the address bar of the browser, even untrained employees can use this feature for valuable monitoring tasks.

Visualization

Intuitive filtering of the visualized inspection tools and results

Visualization in the image

Inspection results are displayed in the image



nVision-i Software Image Processing Tool Examples

LOCALIZATION of areas, edges, and shapes

<p>AREA</p> <p>The tool "Localize area" is used to estimate the position of a part in a scene using Blob analysis</p>		
<p>EDGE</p> <p>Finds an edge within the defined search field and serves as a guide for subsequent tools</p>		
<p>SHAPE</p> <p>Compares learned patterns within the defined working area and also sees as position correction for subsequent tools</p>		

COUNTING areas, edges, and shapes

<p>AREA</p> <p>Determines the number of contiguous dark or bright regions</p>		
<p>EDGE</p> <p>Determines the number of edges along a line/search beam</p>		
<p>SHAPE</p> <p>Identifies and counts objects whose contour matches the learned contour</p>		

DETECTION of the presence/absence of a feature based on pixel values and contrast

<p>BRIGHTNESS</p> <p>Detects the average brightness as a function of the threshold range within a defined area in the image</p>		
<p>CONTRAST</p> <p>Detects the contrast as a function of the threshold range within a defined area in the image</p>		
<p>AREA PIXELS</p> <p>Detects the number of pixels as a function of the threshold range within a defined area in the image</p>		
<p>SHAPES</p> <p>Identifies and counts objects whose contour matches the learned contour</p>		

disoric CS-60 series 2D cameras provide the ideal solution for low-cost machine vision, especially for applications requiring:

- Defect identification
- Hole detection
- Orientation confirmation
- Presence/absence
- Shape recognition
- Count and measure
- 1D and 2D code reading
- Quality assurance for a wide range of applications



wenglor
the innovative family

Vision Lighting

Proper machine vision lighting is crucial for vision systems as it directly impacts the quality and reliability of images that the vision system captures. Vision lighting systems use high-quality LEDs to provide the proper amount of contrast, brightness, and uniformity to an imaging surface, allowing a good image of the code or object to be captured. Lighting fixtures are selected based on the application and could include backlighting, diffuse lighting, or dark field lighting. LEDs are available in many colors (including infrared), but the most popular color is white.

Not only will you save money with our vision lighting, but with proper lighting, you can guarantee:

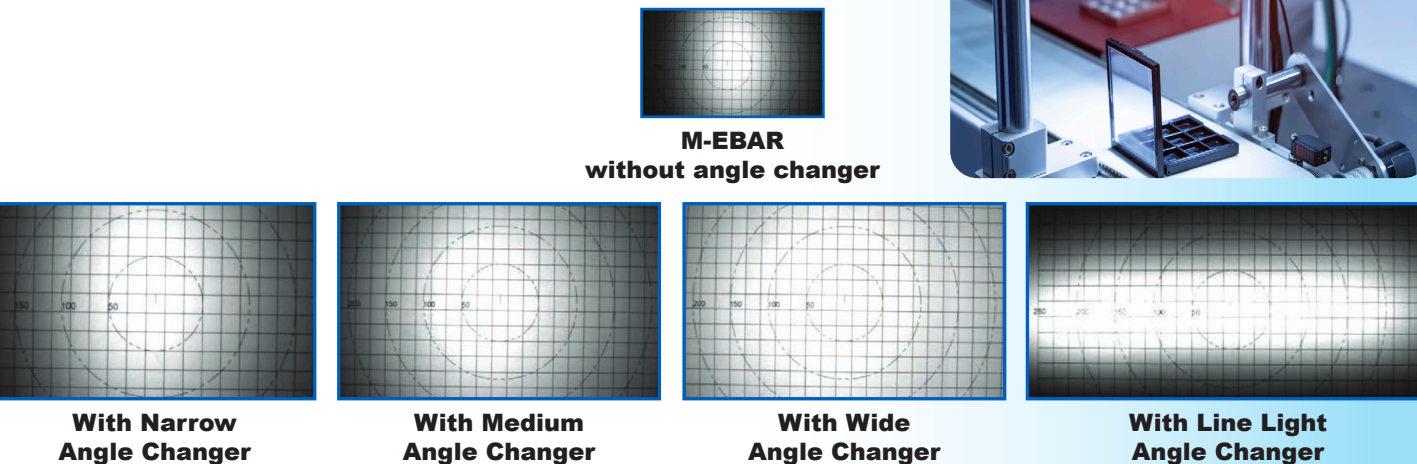
- Accurate and clear images the first time for faster throughput
- Ability to detect subtle defects or anomalies in QA applications
- Improved contrast
- Reduced noise
- Optimized depth of field
- Consistent results

Bar Lights

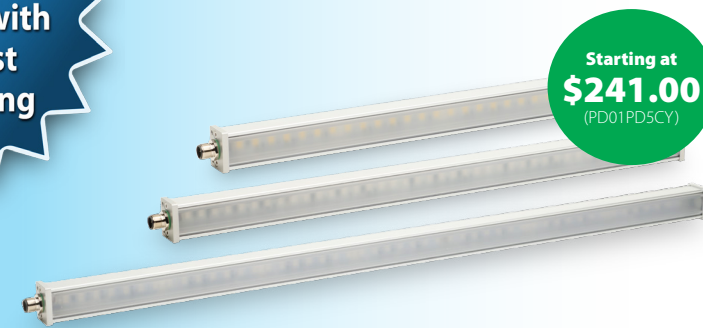
Bar lights consist of a linear package (bar) with a row of LEDs. Bar lights can be used for various types of lighting schemes such as bright field, dark field, and dome effects.

Wenglor OPT Series Bar Light

- Available in white and infrared models
- Available in lengths of 125mm, 250mm, 375mm, and 500mm
- Operate in continuous or strobe mode
- The angle of illumination is easily changed with the addition of snap-in angle changers for the following angles: transparent, narrow, medium, wide, line light
- Angle changers available with standard (unfiltered) or polarized filtered
- Bar clamps (sold separately) simplify installation



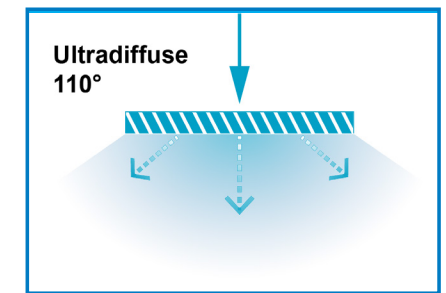
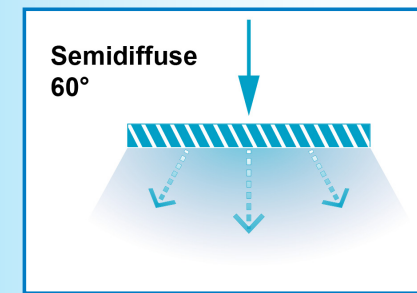
See clearer images and BIG savings with our low-cost vision lighting



lumher

Lumher PD and FD Series Bar Lights

- Available in lengths of 90mm, 180mm, 360mm, 450mm, and 630mm
- Models with fixed angles of either 60° or 110° (±30° or ±55°)
- PD series includes models that are continuous only and models that can be operated in continuous mode or as a strobe
- FD series are high-power continuous mode only and emit twice the light output of the PD series
- White, red, and infrared light models
- Easy-to-install mounting brackets sold separately



Ring Lights

Ring lights are LEDs contained in a circular package. Ring lights can perform many functions such as a ring, dome light, and low-angle light. Ring lights are preferred in areas with minimal space that require a compact lighting solution.



Wenglor OPT Series Ring Lights

- Models with selectable light emissions include red/cyan and white/infrared
- Sold in 80mm and 130mm diameters (approximate internal light diameter)
- Operate in continuous or strobe mode
- Accessories available to convert a ring light to a dome light or low-angle dome light quickly



Machine Vision Lighting Continued

Ring Lights Continued



Starting at
\$658.00
(RD1PD5CY)

Lumher RD Series Ring Lights

- Available in a fixed 60° or 110° angle ($\pm 30^\circ$ or $\pm 55^\circ$)
- White light in either angle, or 30° angle in infrared
- Ruggedly constructed one-piece anodized aluminum frames in sizes of 135 x 135 x 25mm and 225 x 225 x 25mm
- Continuous and continuous/strobe models available

Flat Dome Lights

Flat dome lights provide a great illumination solution for machine applications in pick and place or logistics scenarios. The fixture of a flat dome light consists of a flat light with a hole in the center for the camera to look through.



Starting at
\$1,102.00
(OPT2435)

Wenglor OPT Series Flat Dome Lights

- White and infrared light models
- 200 x 200mm and 300 x 300mm sizes
- Operate in continuous or strobe mode
- Mounting brackets are available

Flat Lights

Flat lights provide a solution for backlighting. Backlighting is used for applications such as quality control to detect presence/absence, edge defects, fill level, and silhouetting.

Wenglor OPT Series Flat Lights

- White and infrared light models
- 200 x 200mm to 400 x 400mm sizes
- Operate in continuous or strobe mode
- Mounting brackets sold separately



Starting at
\$744.00
(OPT2418)



Spot Lights

Spot lights are used when a highly focused light source is needed. Spot illumination is excellent for creating contrast on specific features from varying distances.



Starting at
\$827.00
(BS1PD5QY)

Lumher BS Series Spot Lights

- White light emission
- 125 x 125 x 15 mm size
- 6° lighting angle ($\pm 3^\circ$)
- Continuous and continuous/strobe models available



Starting at
\$766.00
(BD1PD5CY)

Lumher BD Series Flat Lights

- Constructed to withstand harsh environments
- White light emission
- 125 x 125mm and 125 x 215mm sizes
- 60° light angle ($\pm 30^\circ$)
- Continuous and continuous/strobe models available

Machine Vision Lighting Accessories

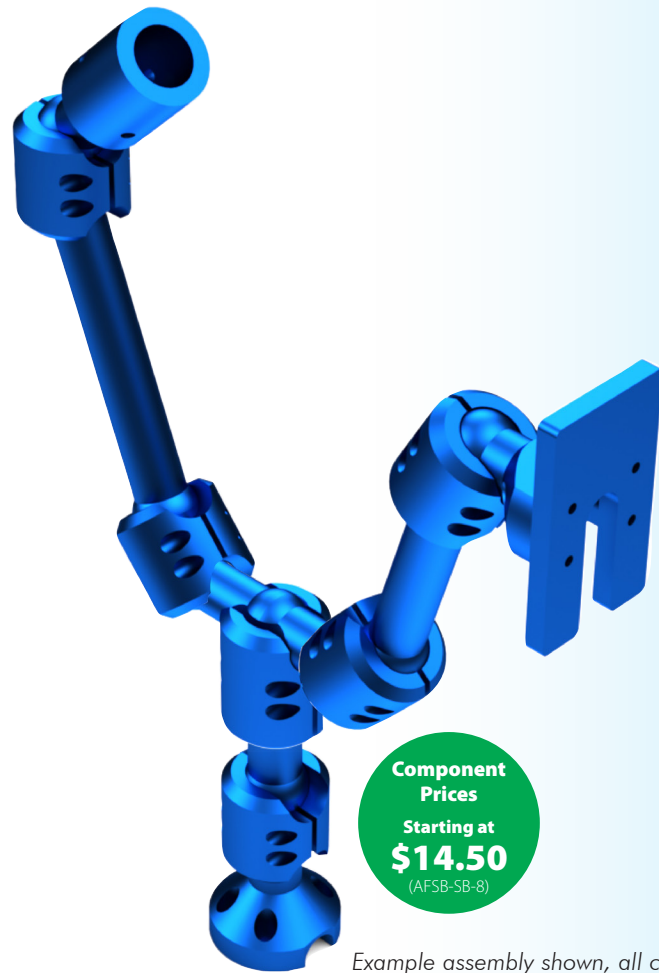
Numerous anchoring accessories are available for installation and customization of your machine vision project.

- Angle changers and bar clamps for Wenglor bar lights
- Mounting brackets for Wenglor backlights, dome lights, and ring lights
- Mounting brackets for Lumher lighting fixtures
- Dome light accessories for Wenglor ring lights





Easy Device Mounting with Precise Adjustment



Component Prices
Starting at **\$14.50**
(AFSB-SB-8)

Example assembly shown, all components sold separately.

Device mounting systems are components configured and assembled to mount vision cameras, lights, sensors, scanners, and other devices. They allow for precise adjustment and ease of equipment installation. These systems are modular and components are selected individually to suit the needs of the application. Swivellink mounts are a great way to mount identification equipment.

Swivellink systems start with a base, which is fastened to the mounting surface. Then a link or tee is connected. Links are connected using knuckles which provide full rotational adjustment. Mounting plates finish the mounting system which can be predrilled for specific manufacturer equipment or available as a blank and custom drilled. Components are available in metric or imperial units, and in standard and extra-small sizes. Sold as individual components or as kits that include everything you need for an assembly. Available components include:



Links



Tees

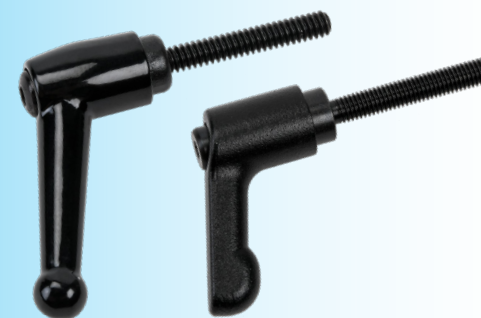


Mounting Plates



Sensor Mounts

Clamp Handles
tighten joints without the need for tools



Mounting Kits
include all components needed for the most popular assemblies



Bases



Knuckles

